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THE MUNDANE OR ORPHIC EGG.

Being the largest SCULPTURED VASE extant found by SIR ROB. AINSLIE and M^r MEYER near Lemissa in the Island of Cyprus.

Published Sep^r 5. 1823 by Hurst, Robinson & Co. London

SABÆAN RESEARCHES,

IN A SERIES OF ESSAYS,

ADDRESSED TO DISTINGUISHED ANTIQUARIES,

AND INCLUDING

THE SUBSTANCE OF A COURSE OF LECTURES,

DELIVERED AT THE

Royal Institution of Great Britain,

ON THE ENGRAVED HIEROGLYPHICS OF

CHALDEA, EGYPT, AND CANAAN.

BY

JOHN LANDSEER,

FELLOW OF THE SOCIETY OF ANTIQUARIES, MEMBER OF THE LONDON ROYAL ACADEMY OF
ARTS, AND ENGRAVER TO THE KING.

ILLUSTRATED WITH ENGRAVINGS

OF

BABYLONIAN CYLINDERS,

AND OTHER

INEDITED MONUMENTS OF ANTIQUITY.

LONDON:

PRINTED FOR HURST, ROBINSON, AND CO.;

AND

ARCHIBALD CONSTABLE AND CO., EDINBURGH.

1823.



SABBAO

RESEARCHES,

BY JOHN LANDSEER.

J. LANDSEER FECIT from a Babylonian CYLINDER brought to England by CAPT. A. LOCKETT.



Published 1853 by HURST, ROBINSON & CO. London.

ECCE SIGNUM!

אבן משבית

PREFACE.

WHAT has been asserted by Mr. Jacob Bryant—partly on the authority of Plutarch—of the ancient history of Egypt, is at least equally true of that of the nations of Western Asia. “There are some slight and obscure traces of true History, here and there to be found, as they lie scattered up and down. But it requires a person of uncommon address to find them out: one who can deduce great truths from scanty premises. This is at first sufficient to deter a person from going on in a study of this nature. But upon recollection, we find that we have helps to which the more early writers were strangers. We have for a long time had light opening upon us, and begin now to avail ourselves of the blessing. We talk indeed of ancient days, and times of antiquity; but that time is most aged which has endured longest, and *these* are the most ancient days, in which we are ourselves conversant. We enjoy now an age of accumulated experience; and we are able to make use of the helps which have been transmitted, to dispel the mist which has preceded.”

Of this ingenious turning of the telescope of Time, by means of Mr. Bryant's machinery, I would beg leave to avail myself. His main proposition may not be entirely free from sophistry. That the modern, are the most ancient, times, may be mooted: but the “helps” which have been transmitted from those young-old times, is certain; and among those helps will be found to be the ENGRAVED CYLINDERS and other ancient sculptured remains, of Babylon, Nineveh, Persepolis, Sidon, and wherever else there were seats

of Art in Assyria, Canaan, Persia, and the oriental Æthiopia: some of which sculptures form the proper subject of the present volume. When they are once perceived to be astronomical monuments of very remote dates, they cannot fail to be regarded as deeply interesting to antiquaries, to chronologists, and to all who would accurately study the early scriptural records, and the general history of man. To render manifest those scientific and historical references, is my chief purpose in publishing these *SABÆAN RESEARCHES*.

Since he who presumes to undertake an archæological speculation so far removed from ordinary themes, should be able to abstract himself from present times and circumstances; to retrospect beyond the reach of literary records; to disencumber himself from the drag of local prejudice and existing modalities, yet to carry with him the essential results of the learning of ages, while he resolutely inspects the dim, dangerous, and debateable land which lies between the territories of Memory and Oblivion;—should possess the power to grasp at what Time and War had consigned to the latter, as he treads the palpable obscure; to see the parts of Nature, bearing the same simple and scientific relations to each other and to the human mind, that they did thousands of years ago; to throw back his intellect toward those remote periods, and reflect as men then reflected on objects of visual and of mental cognizance; to assimilate his own notions and discoveries, with the original thinkings of primitive and unsophisticated ages; to proceed in his researches with unwearied, calculating, diligence, and be with caution bold.—Since these, and more than these, united exertions of Imagination and Judgment, were required, in order to examine critically and with due effect, such curious antiques as are here submitted to the public—it may be asked how I came to engage in the task?

To this I can only reply, that accident threw some of the Cylin-

ders in my way, somewhere about eighteen or twenty years ago, (whilst I was seeking materials to illustrate the origin and progress of ancient engraving,) which were then denominated, and generally believed to be, Persepolitan—this word seeming to restrict them to Persepolis as the place of their original production: but Capt. Lockett, Mrs. Rich, and other travellers, have since brought engraved gems of this description, from the site of the metropolis of Ninus and Sardanapalus, and from the very mounds of ruin where “the Queen of Nations” formerly sat enthroned; and astronomical science having beamed on them from above, something of a character superior to mere antiquarian curiosity, as those words are generally understood, was thus engendered and quickened into life. I became attached to the study of these hitherto neglected monuments. I was at first smitten with, and afterward wedded to, the investigation of their mysterious contents, and, unless I deceived myself,

“Pleasure lit her torch at Virtue’s flame.”

I was now to behold, in all the simplicity of their early beauty, the messengers of the most remote tidings: I was to meet, face to face, the witnesses of ages: I was to have the honour of an audience with Truth in her loneliness: and the purest homage was to be offered, at the most unpolluted of her upper fountains, to the genius of History.

Notwithstanding that the subjects of these cylindrical gems are here severally treated, and that each of my epistolary essays may be considered as an independent archæological dissertation, they are not altogether unconnected, and something like orderly sequence will be found to have been observed, in as far as I felt or fancied that such order contributed to facilitate my researches, and was likely to conduce to the ready arrangement in the mind of the

reader, of the information which it was my purpose to convey. Hence, the first essay will be found to contain evidence in proof that the engraved Cylinders of Western and of Southern Asia, are the signets mentioned and alluded to in our early scriptures, and by the more ancient of the profane historians. The second shews that such signets were not merely matrices of seals, but were ocular mystic signs. Having cleared these two points to the best of my information and ability, I have next proceeded to shew that some of these mystic signs had reference to the periodical religious festivals of the star-worshipping nations of remote antiquity, and others to their judicial astrology, producing—in the engraved contents of such cylinders as I exhibit—examples of each.

These exhibited examples were the ostensible—and in truth the real—subjects of a course of lectures delivered at the Royal Institution: the Essays being substantially the Lectures amplified and more copiously illustrated.

I intended to have pursued my researches further, and that the present Volume should have contained a greater number of both of the above mentioned species of antique signets, but unforeseen circumstances which I tried in vain to control, have prevented me; and, in fact, since I could not have exhausted the subject, even were an ante-diluvian extension of the period of life to be granted me, the present volume is nearly as much a whole (in the strict sense of unity) as if it had contained double the number of illustrative examples and of pages.

As the investigation of monuments of very ancient art, is the especial purpose of these researches, I hope it will on the whole, be found by the scholars and critics, to have been no unfit task for an antiquarian artist to have engaged in, however imperfectly qualified in some respects. Perhaps too, they will allow that an impartial and disinterested *lay* writer, is likely to ascend into the

Sabæan heavens with a freer spirit than if he had been educated to the priesthood, and had been embarrassed in his flight by the creed of Brahma or of Mohammed. I chose the epistolary form for these Essays, because it seemed to promise me more unrestrained liberty of will, and—in short, because I found it easier, and more practicable to my unscholastic habits, than would have been any more formal and severe—any rigid and rugged, road of *research*. And I employed this latter term in the general designation of my volume, because it implies, not compleat and final accomplishment, but continuity of investigation, and the existence of an exploring purpose not terminated.

When an inquiring and observant traveller from afar, journeys through an interesting tract of country, impressions come home to his feelings with a freshness and vividness of form and colour, which is either unknown to its inhabitants, or appears to them trite and unworthy of notice. Common places to them, are to him uncommon: the languor of habit has not repressed the healthful enjoyment of novelty and truth: but, seeing such scenes with unworn feelings, he receives from them the genuine impressions which nature intended to man. In some places, I have indulged these sentiments: in others, I have felt admonished by that *dæmon* which haunts, or infected by that effluvium of criticism which pervades, the literature of modern Europe, and have suppressed—I may not say what.

Notwithstanding what I have suppressed, I cannot on the whole, but be apprehensive that some portion of what I have not suppressed, may fatigue, or but faintly affect the learned; and those readers of oriental travels, who have been used to regale on highly spiced literary viands, and to wash them down with poetical arrack, I cannot but fear may not relish my milder repast;—my

milk and honey from the land of Canaan ; my butter of Deborah, in a homely dish.

I may be told that this Scriptural butter, was more properly that of Jael. True : but Jael I have neither the wish, nor intention, nor ability, to emulate. Any wearied star-worshipper or chieftain,—whether or not the stars in their courses fight against him, may turn in hither, and freely repose in my tent, without the least dread of being nailed there.

One word more of confession to the candid reader, more especially if he be learned. After laying by a work of art or literature for a while, its author,—as every one knows—regards it with refreshed attention ; and perhaps has contrived to divest himself, in some degree at least, of his partiality for his former thoughts, and mode of expressing them. He looks at his work again, as it were with the eye of another.—Upon a late revisal of what I have written and printed, I am led to fear that, with regard to some points, I have sermonized with too frequent and laboured recurrence to my texts. Concerning the *winged Sun*, for example, I might perhaps with advantage to the whole, have suppressed some parts, and have trusted more to the sculptured indications. Yet of this I cannot be certain, nor in fact, am I certain, that mere misgiving is not here flowing from my pen. It may be true that

“ Vice is a monster of so frightful mien,
“ As to be hated needs but *to be seen* :”

But we cannot with similar reliance upon the word of a poet, trust Astronomical monuments to the public gaze, nor suppose that to be recognized and loved, they need but to be inspected, or why should the engraved cylinders which have long been known in Europe, have remained for that period in the state of a sealed book ? I am sceptical, on the whole ; and I trust that this expres-

sion of the doubts which have arisen in my mind upon these points, will form a sufficient apology to those readers of antique discernment, who might else feel, with the learned and poetical consciousness of Horace, something of his gentlemanly indignation against those who should presume to teach *him* to sing.

Of the egg-shaped vase which has been prefixed in the way of frontispiece to this volume, some account will be found in pp. 81-4: and as the reader will perhaps have noticed some problematical appearances of assault and battery, near that little Bull which stands in the arched recess, it may be as well to mention that these are not the work of Time, but are bullet-marks, the result of the Mohammedan hatred of heathenish *idols*, and of the Turkish soldiery having made use of the sculptured ornaments of this curious vase, as targets at which to exercise their small arms. Amongst these barbarians, (as with modern targeteers), it will readily be conceived that "the *bull's eye*" became a favourite point to hit.

As the festoon of engraved gems which is prefixed to the first Essay, exhibits (with the exception of a very old and large one forming the ostensible subject of the fourth Essay, and of which the dimensions are marked on the margin) all the cylinders of which any account is contained in the present volume, of *their real sizes*, it has not been thought necessary to specify this in any other manner; nor to state in what proportions their impressions have been enlarged in the Vignette Head-pieces, for the more convenient inspection of my readers.

J. L.

London, June, 1823.

tion of the whole which I have upon the whole
will form a sufficient apology to those readers of various
ment, who might object, with the learned and poetical com-
ment of Horace, something of his gentleness in indignation against
those who should presume to touch him to sing. *Non est*
Of the copy of verse which has been prefixed in the way of
introduction to this volume, some account will be found in p. 31-
4: and as the reader will perhaps have noticed some problematical
appearances of words and letters, near that little Ball which
stands in the second poem, it may be as well to mention that the
are not the result of a fault, but are rather a mark, the result of the
Mossamedes, a kind of Arabian, and of the Turkish soil.
they having made use of the sculptured ornaments of this curious
type, as tokens in which to express their small gains. A more
than, but in the way of a note, it will be well to
remind that the words, *Non est*, are not to be taken
As the Editor of this volume, who is well known to the
many, will have observed, the copy of the whole, and in which the
the whole subject of the fourth poem, and in which the
allusions are made to the history of the Arabs of which
any person is conversant in the way of a kind of Arabic
it has not been thought necessary to explain, but in the other
part, but to state in what manner the words *Non est* have
entered in the Volume. It is not, however, to be
expected by any reader.



ESSAY I. TO THE RIGHT HON. SIR JOSEPH BANKS, BART., G.C.B., &c.

SIR,—The following observations tending to shew that the Signets of the nations which anciently inhabited the banks of the Tigris and Euphrates, were, at least in some instances, of a cylindrical form, may perhaps, not be unworthy of your* attention and that of the Society of Antiquaries. The observations were suggested chiefly by the contemplation of a considerable number of engraved gems of this kind, which are in my possession, and which have been recently dug up at Babylon, and brought to England by that persevering Oriental traveller and scholar, Capt. Abraham Lockett.

Many of these cylinders are formed of hæmatite, mistakenly termed loadstone by Mr. Raspe, in his Catalogue Raisonnée of Tassie's collec-

* With some corrections and additions, the result of subsequent reflection on the subject, this letter addressed to the late Sir Joseph Banks, has already been printed in the Archæologia of the Society of Antiquaries. I was not then aware that my meditations on the subject of ancient Sabæan signets, would have run out to such length. Its re-appearance here, in substance, as the first of a series, and root of those Essays which (as the reader will perceive,) have since grown from it, was indispensable.

tion : the rest are of carnelian, opal, jasper, agate, chalcedony, and other hard and precious stones.

It is well known that engraved cylinders of the same kind, have been brought to Europe before these, the major part of which were collected during a three weeks residence among, and in the immediate neighbourhood of, the ruins of ancient Babylon. Of those, some are contained in the British Museum ; others are at the Borghese Palace, and the Museums of Germany ; and several are at Paris, in the cabinets of the king of France, and of Mons. Silvestre de Sacy, and other distinguished antiquaries. The idea which has generally prevailed respecting them is, that they are Persepolitan amulets. Raspe calls them amulets ;* and the modern Arabs, by whom they are found and preserved, venerate them as possessing some inherent talismanic virtue, with the precise nature of which they are professedly unacquainted, but which, from hope, or from fear, they desire to propitiate.

Considerable numbers of these gems have, from time to time, been disinterred by the Arabs, in digging up those bricks of ancient Babylon, which constitute the material of which the town of Hellah and most of the houses within a certain distance of the ruins, are chiefly built. It should be remembered, as a general principle, that the lower these Arabian labourers dig into the masses of rubbish and brick, the more likely they are to turn up such remains of antiquity, as, like the gems before us, are formed of imperishable substances ; and it should also be known, that parts of the sub-structures being now all that remain of the palaces and temples of this great metropolis, they are more likely than at any former period, to recover such productions of the Babylonian arts of *remote* antiquity as remain undestroyed ; for the superstructures having gradually been entirely carried away ; the Arabs are now digging among the very foundations which were laid by the architects of Nebuchadnezzar, if not by those of Ninus and Semiramis.

It is of small importance to us that the modern veneration for these curious antiques, has arisen, partly at least, from the romantic supersti-

* Catalogue Raisonné, &c. p. 64.

tion of Persia and Arabia. The antiquaries of Europe, listening to the legendary lore of those of the East, have imbibed or acquiesced in their belief respecting the original purpose for which these engravings were so laboriously wrought; and have done so, as it should seem, rather because their own attention has not yet been critically directed to the subject, than from any regularly induced conviction that this belief was founded on a correct knowledge of the superstitions of those far distant ages which gave birth to the cylindrical engravings.

I shall therefore, with your leave, Sir Joseph, and that of the Society, proceed to shew why I conceive the gems to have been *originally* not worn as talismans or amulets, but used as SIGNETS, that is to say, impressed for the purposes of ratifying such social and religious transactions as called for a sacred pledge.

The especial use or purpose for which antiques of this curious description were intended, and to which they were originally applied, I conceive, should be sought for, 1st. In those local oriental customs of the early ages, which history or tradition has handed down: 2dly. In the peculiarities of their forms: 3dly. In the paucity or abundance of their numbers, when combined with the above considerations, and that of the places where they were found: and lastly, in their engraved contents.

To treat of them, first, with reference to the ancient customs of Chaldaea or Assyria: Herodotus, in detailing those customs as they existed in his time, says that every Assyrian possessed a signet or seal;* for so the Greek ΣΦΡΑΓΙΔΑ should be rendered, and not seal-ring, as it has been translated by the Rev. Mr. Beloe. Neither the form of the seal, nor the manner in which it was mounted, are mentioned by Herodotus.

The manner in which the engraver's art is spoken of in the Pentateuch, shews that in the time of Moses, it was an art of no recent invention; and that among the surrounding nations, signets were then common, and in well-known use.† The onyxes, for the sacred ephod; the plate

* Clio. cxcv.

† Dr. Watts uses a similar argument, in treating of the figure of the scriptural Cherubim. He says, "Whatsoever figure belonged to these cherubs, which is so much unknown to us, it was certainly a common idea and *well known* figure to the Jews in that day, for Moses doth not concern himself to give any particular description of them, as he does almost of every thing else, and yet the Jewish artificers made them right."—*Remnants of Time*, xix.

of gold for the mitre of the high-priest; and the precious stones for his breast-plate; were all expressly ordered to be engraven "*like the engravings of a signet*," that is to say, in intaglio. And these words, "like the engravings of a signet," are, in the book of Exodus, frequently repeated.

It is true, Dr. Clarke, in commenting on an engraved monogram of Ptolemy, which he found during his travels, supposes that the signets of the time of the Hebrew patriarchs, were flat, like the seals at present in use; and this he supposes, because the precious stones of the ephod and those of the breast-plate of the high-priest were "set in ouches of gold;" he gives no other reason: yet the Book of Exodus plainly says,—not that these stones were set in ouches, &c. *as signets are set*, but—that they were graven *as signets are graven*; or, as it is expressed in another chapter, "like the engravings of a signet." The latter expression is mentioned no less than three times in the course of chapter xxviii., and is again repeated twice, in chapter xxxix.; and in this latter chapter, it is also said that "they wrought onyx-stones enclosed in ouches of gold, graven as signets are graven."

The circumstance, then, of these costly stones being engraved like signets, is, in holy writ, kept quite distinct from that of their being set in ouches of gold: indeed, it is fairly to be inferred from the above passages, that signets were *not* thus set at the time; for when we reflect on the remarkable attention to detail which characterises this part of the Bible, and its habitual repetitions, it is rather to be presumed that a writer, studious of simplicity and exactness, and inspired by truth, would either have repeated, concerning the precious stones of the breast-plate and ephod, that they were *graven as signets are graven, and set as signets are set*; or, using other words, would have said, *they were engraven and set in ouches of gold, like signets*.

[Since this Letter to Sir Joseph Banks was first printed by the Society of Antiquaries, I observe that Mr. Bruce, too, has entirely misapprehended the meaning of the scriptural expression, "like the engravings of a signet;" and while the Cambridge traveller has thought it had reference to the manner in which signets were set (in metal); the Caledonian

has supposed that it denoted the distinction between hieroglyphical and alphabetic characters; and that only the latter were used for signets, (which is another very palpable mistake, as the various hieroglyphical signets now extant will shew): whereas the words "like the engravings of a signet," are intended simply to denote direct incision with the tool, by the Italians termed *intaglio*, which is now become, in all the languages of Europe, a technical word, distinguishing this mode of art from engraving in *cameo*, from sculpture by *excision*, and from that species of low relief bedded in the stone, which was, at the time of the Hebrew exodus, so much in use among the engravers of the Egyptian hieroglyphics. "Like the engravings of a signet," are only other and more familiar words for saying, such engraving as is performed with the view and for the purpose of yielding impressions in relief.

The powers of original thought, however, of the reverend and learned Secretary of the Newcastle Society of Antiquaries, have carried his views of the subject more accurately forward; and he very properly observes, that "their being *intaglios* shews that they were intended for the purpose of sealing with." The British resident at Baghdad has also expressed himself in other words, to the same effect, in his second Memoir on Babylon.]

You will have the goodness to observe, Sir Joseph, that while I deny Dr. Clarke's inference as to the oriental signets of this early period being set in ouches of gold, I argue from this reference to the book of Exodus, the frequency of signets in the time of Moses. Josephus, too, informs us that, some ages before this, when Pharaoh invested the youthful Joseph with power over the land and people of Egypt, he entrusted to his discretion the use of the royal *signet*, along with, and as the ostensible mark of, the royal authority. Yet we may not suppose that the Hebrews learned either the arts of the engraver and lapidary, or the practice of sealing, during their Egyptian servitude; for we read in Genesis, chapter xxxviii., that Judah, the elder brother of Joseph, possessed a portable signet, which it would appear that he carried about with him on ordinary occasions, and left as a pledge with his disguised daughter-in-law, when on his way to a sheep-shearing at Timnath; an

event which must have happened several years before the sons of Jacob were driven into Egypt by famine.

In one of those lectures on ancient engraving which I delivered at the Royal Institution, some years ago,* I have asserted, on the authority of Cedrenus, the still earlier existence of imitative art, such as is displayed on these cylinders, among the Chaldean progenitors of the Jews; and it is by no means improbable,—considering the numerous uses to which the signet may have been applied in a rude age, when writing could have been practised but by few persons; considering too, the great number of signets that must in consequence have become necessary,—that Terah the Chaldean, the father of Abraham, and the first artist whose name is anywhere upon record, was an engraver of signets, as well as a sculptor or modeller of such small idols as Rachel,† in three generations from Terah, is recorded to have hidden under the furniture of a camel.

Not to wander, however, or to wander as little as possible, from well-authenticated facts, let us here reflect on the great number of these gems, which have been disinterred at Babylon, and at Nineveh (of which the modern Mosul is the site); and let us regard also their dimensions, and the peculiarities of their form.

Their abundance may in some measure be estimated, by the circumstances, that thirteen were collected in the course of the three weeks that Captain Lockett remained at Babylon; that several others were obtained, during the same period, by Dr. Hine and Mr. Rich; that, as Sir William Ouseley informs me, one English gentleman at Aleppo was lately the proprietor of forty; that the French antiquaries have possessed themselves of considerable numbers of these curious works; that scores were previously to be found in the museums and cabinets of Europe; and that, probably, hundreds might be purchased of the Arabs, Jews, jewellers, and antiquaries of the East, beside those which may remain to reward the researches of future travellers.

* See Lect. I. edit. 1807.

† Upon this subject, Philo and Dr. Hyde are quoted and controverted by Mr. Costard, in his “Rise of Astronomy among the Ancients” (p. 5): but in denying what they have asserted of talismans, Mr. C. produces good evidence in proof of the existence of ancient signets.

The head-piece to the present Essay contains tolerably faithful portraits of seven such cylinders, including a very interesting one brought from Antioch, by Sir William Rouse Boughton, Bart. and which is of jasper-opal. Two signets, of an hemispheroidal form, (and concerning which I shall subsequently have some observations to offer,) act as tassels to the festoon of cylinders; and the heads of the Lion and Bull which sustain it, allude to the zodiacal places of the summer solstice and the vernal equinox, at the far-distant period to which most of the engraved devices of our gems will be found to bear reference.

The dimensions of these curious antiques are various; some of them being ten times as large as others. Speaking generally, they are from three-fourths of an inch to more than two inches in length; and while the smallest of captain Lockett's is less than an inch, the largest is three inches, in circumference. Their form, as already stated, is cylindrical. Some of them are regular cylinders, due allowance being made for the wear and tear they have undergone: but others are not exactly cylinders, having a small degree of concavity or hollowness in their sides, like a dice-box: and all of them are perforated longitudinally.

From the very great time and trouble it would require, even with our modern facilities of accomplishment, to shape, and perforate, and engrave elaborate devices on, substances so exceedingly hard as jasper, chalcedony, jade, and the more precious stones of the Indian peninsula, we might safely infer that the authors of these ancient relics, had some important and especial purpose in view. And when we combine these circumstances with historical evidence, and with other localities which I have brought forward, and shall further proceed to adduce; what purpose appears so likely as the ratification of those bonds of intercourse between nations, and of those social compacts and deeds of traffic, which took place, as we learn from the scriptural records, even at periods anterior to those patriarchal ages which have been mentioned? Introduce a metal axis, and mount one of these engraved gems upon the principle of a garden rolling-stone, it becomes at once a seal, easy to use and copious in its contents.

It is no very forced conclusion then, that the longitudinal piercing so

laboriously performed, was for the reception of an axis; and the axis, that the cylinder might revolve in rendering its impressions. I may here remark, that probably, of the forms which have been subsequently invented or adopted, none is so well suited as the cylindrical, to the purpose of comprehending much subject matter within a small compass. This capacity, combined with portability, is therefore more profoundly studied than may, at first sight, appear. On what other form, having the perpendicular height of an inch, and a base of only half an inch in diameter could five human figures, beside accessory matters, be distinctly engraven?

Dividing these antiques into classes, I conceive that the largest and heaviest, have been thus mounted, and kept as stationary or table signets at the palaces and other great offices of state, of Assyria, Canaan, Persia, and Egypt, to be used on public occasions: and what seems to corroborate my opinion of their having, in some instances at least, been thus mounted, is, that in clearing out the dirt from captain Lockett's jasper cylinder, (which is somewhat more than two inches in length), I found it to contain the remains of an axis of metal.

The smaller cylinders, I conceive to be probably of less remote antiquity: or, in other words, to have been produced after the clumsiness of early contrivance had in some degree yielded to considerations of convenience, if not of elegance. For the hollowness in the sides of such as are not strictly cylinders, there must have been some reason: and none appears more likely, than a desire to adapt their shapes to the convexities of the human form, so that they might be worn with the greater comfort.

The same kind of perforation, which occasionally served for the admission of an axis, served in other instances, as the passage for a cord, or a string of leather: they were thus attached to armlets, finger or thumb rings, necklaces, and the walking-sceptres of such as were of patriarchal or magisterial authority: so that, when their possessors travelled on journeys of business, these elaborately wrought instruments of ratification; these pledges of honour, or of superstitious faith, became at once easily portable, and personal ornaments.

Judah was travelling thus at a time when patriarchs, as far as is known,

were neither incumbered with money, nor purses, nor pockets, when he happened on that unfortunate rencontre with Tamar, to which we are indebted for the earliest scriptural mention of a signet. Another incidental mention of an oriental signet of this kind, occurs in Ferdosi's ancient Persian poem, which is intitled, *Shah Nameh*, (or the *Book of Kings*), and which details, amongst the earlier historical events of that empire, the exploits of the Persian hero Roostum, the Alfred, or rather the Arthur, of his country.

Ferdosi, (as quoted by Sir John Malcolm) records that when Sohrab, the son of his hero, had received his death-wound from the hand of his unknown father, he tore open his mail, and showed the seal which his mother had placed *on his arm*, when she revealed to him the secret of his birth, and bade him seek his father, "The sight of his own *signet*, (says Ferdosi), rendered Roostum quite frantic," &c.*

The story is romantic, and perhaps fabulous: but the fact that signets were thus worn, may easily be credited. It is most likely that the poet copied it from nature: and it proves that Ferdosi knew his Persian readers would believe of their remote ancestry, that they had signets, and that those signets were of a nature to be occasionally worn on the arm: I suppose as the fastening-ornaments of their bracelets, or armlets; which, of the smaller cylinders, may very well be credited.

Some doubts as to whether Sir John Malcolm has rightly understood this passage of Ferdosi, have been expressed by an eminent orientalist. Though I cannot decide the point, I am quite sure that the doubts of a first-rate scholar ought not to be dissembled. The passage in the *Idyl of Solomon*, "Set me as a seal upon thine arm," doubtless alludes to the same oriental custom, and is of a date between Judah and Roostum; but it does not set the question at rest, of, whether a signet, or a seal, (that is to say, an impression from a signet), be meant? Perhaps, Sir Joseph, you may think otherwise of the following extract from "*Annals of Oriental Literature*,"† which is taken from a preceding part of the same poem of Ferdosi, that is cited above: being an account of the nup-

* Malcolm's *Persia*, vol. i. p. 37.

† Part I. Art. *Persian Anthology*, Episode of Sohrab.

tial night of Roostum with the fair Tahiminah, who afterward became the mother of Sohrab.

“Roostum wore as a bracelet on his arm, a *seal*, which was renowned throughout the world for its talismanic virtues :* he took and presented it to her, saying, This you will keep by you, and if fortune bestow upon you a girl, take and entwine it among her braided hair, and there it will prove an *auspicious star* and a fortunate omen ; but, if you are favoured with a boy, bind this memorial of his father round his arm, and he will be another Sâm Nahriman in aspiring magnanimity ; he will tear *the constellation of the Eagle* from its towering mansion,” &c. This latter expression had probably some astrological allusion to the royal horoscope of the hereditary enemies of Roostum and Persia. Atair, the brightest star of the Eagle, and almost of the heavens, would, at a certain annual season, and in the lower latitudes of Persia, be on the meridian and very near the zenith.

To me, this signet of Roostum appears to have been of the very same *kind* as those which will be exhibited in the present volume ; but the reader will decide. Such gems are not unfrequently worn among the hair, in the picturesque manner recommended by Roostum, by uncivilized people (perforated gems of a cylindrical form, being, of all forms, the best adapted to the purpose) ; and modern travellers have redeemed from obscurity some curious antiques,† finding them thus worn by the Arabian and Nubian women.

I do not, however, mean to assert that any single mode of portability invariably prevailed : on the contrary, a subsequent essay will exhibit my reasons for believing that these signets were occasionally appended to the walking-sceptres or staves, of Assyria and Canaan.

* To some this may seem at variance with my former denial that these curious monuments were amulets or talismans : but I meant only to affirm that they were engraved for the purpose of sealing with, and not of conjuring with : nor did I presume to deny that superstition might conceive of them some vague notions of their possessing magical properties. A signet may be supposed to possess “ talismanic virtues,” more especially in a romantic poem, while it is strictly, properly, and in plain prose, a signet. What in the present instance was renowned for its talismanic virtues, Ferdosi himself pronounces to have been “ a *seal*.”

† Belzoni, if I rightly remember, adduces evidence of this fact.

But the era of the wild and wondrous exploits of Roostum, is nearer to the time of Nebuchadnezzar, than to that of the patriarch Judah; nor do I place so much reliance on the poem of Ferdosi, as on the evidence I derive from Holy Writ; and I therefore shall return to that earlier period which brings the Hebrews, and those other nations which are believed to have been of Assyrian descent, as it were more in contact with the customs of ancient Babylon, and of their Chaldean ancestors.

In the Book of Job, there is an allusion so direct to the ancient mode of sealing among those oriental nations of which I am treating, and even to the peculiar form of their seals, that (as in the instance I have cited from Ferdosi,) it would be far more difficult to suppose the passage which contains it, is not copied from the pre-existing practice, than that it is. The passage occurs in the thirty-eighth chapter, where the Almighty himself is introduced as silencing the controversy between Job and his friends, by asserting the eternal truths of his own omnipotence, as displayed in the wonders of creation. Having spoken of the formation of the earth, the clouds, and the sea, in a strain of sublime interrogation, he demands, in the twelfth and succeeding verses, "Hast thou commanded the morning since thy days? Hast thou caused the day-spring to know his place, that it might take hold of the ends of the earth?—It is turned as clay to the seal," &c.

Dr. John Mason Good, who has favoured the public with a new and luminous arrangement and translation of this extraordinary production, affirms, that there is hardly any passage in the whole poem that has been supposed so difficult of elucidation as that which I have cited; "nor (continues he) have I hitherto met with a single rendering that is perspicuous, or will bear a critical examination. Schultens says, he has compared and examined with great attention the different attempts of interpreters to explain the fourteenth verse, but confesses, that from none of them has he been able to extract its meaning; and even Reiske, the boldest critical expositor we are possessed of, finishes with exclaiming, *Fateor me non capere.*"

Now Schultens and Reiske have failed of their object, not (as may well be supposed) from lack of scholarship or of judgment, but for want

of the local antiquarian knowledge which these ancient cylinders supply ; and Dr. Good himself, in this instance, (however admirably he has, in other respects, treated his subject), is, from the same cause, not a whit more successful than his predecessors. His version of the passage in question, is,—

“ Within thy days hast thou ordained the dawn,
And appointed to the day-spring his post,
That they should lay gold on the skirts of the earth,
And evil-doers be terrified away from it ?
Canst thou cause them to bend round as clay to the *mould* ?
So that they are made to set like a garment ?”

As the sense of these verses is obscure; as it differs from the rendering of every other Hebrew scholar that I have consulted ; and does not appear consistent with common sense or itself, even with the help of two pages of notes ; I shall venture to argue that it cannot be the true meaning of the original. We may safely believe that evil-doers were not in the days of Job, any more than at present, terrified away from skirts, or other places, where gold was laid. Neither does the substitution of *mould* for *seal* at all clear the sense, but the contrary ; for Dr. Good, remarking on this verse, says, that “ Canst thou cause them to bend round as clay to the mould ?” would be rather more literally rendered, if the word *to* were omitted, and if it were written “ Canst thou cause them to bend round as clay the mould ?” but here again, in his aversion to the idea of a seal, he says, this really means, not as clay causes the mould to bend round, but “ as the mould doth clay.”

I shall now request attention whilst I, fact by fact, and inference by inference, pursue the meaning of these verses in the manner that appears to me the most simple and perspicuous ; at the same time not disregarding that impressive opening of the chapter containing them, which, to the end of time, should sound awfully in the ears of biblical critics.

The chapter begins, “ Then the Lord answered Job out of the whirlwind, and said, Who is this that darkeneth counsel by words without knowledge?” and after those grand interrogations which have been so frequently admired, respecting the formation of the earth, clouds, and

sea, he proceeds: "Hast thou commanded the morning since thy days? Hast thou caused the day-spring to know his place that it might take hold of the ends of the earth, that the wicked might be shaken out of it?"——

Some slight degree of confusion between the light of morning, and that religious light, or day-spring of truth and justice, to which it is likened, must here be confessed to exist (at least in the English translation); and for the transition from literal light, to light personified and invested with knowledge and power, the idiom of the Hebrew language, or the elevated ardour of the poet's imagination, must be accountable. If it is not critical, it is grand: and scarcely does the want of grammatical construction throw even a faint shade over the general meaning of the sentence; nor does it affect at all the metaphor of the seal that follows, and which it is my purpose to explain. The day-spring to be understood in the second interrogation, is poetically adverted to by St. Luke, (chap. i. ver. 7,) on the occasion of Zachariah's prophecy respecting the appearance of St. John the Baptist, the Aurora of the sun of righteousness; where he says, "The day-spring from on high hath visited us, to give light to them that sit in darkness." In Job, however, the personified day-spring is made to "take hold of the ends of the earth, that the wicked might be shaken out of it:" that is to say, their wickedness being brought to light, the punishment which legal justice inflicts, shall follow the exposure. This meaning results, even to the bible-readers of the present day; but what more terrible sentiment must have been felt by those disputants who, throughout the poem, have been darkening counsel by words without knowledge, it might be thought foreign to our antiquarian purpose to attempt to explain.

The next verse proceeds, "It is turned as clay to the seal, and they stand as a garment," or, as the latter member of the sentence is rendered by Junius and Tremellius, "they present themselves like her coverings."

It seems here proper to note that, as the text implies—the sealing substance of the land of Uz, and probably that of the nations on the banks of the Euphrates, at this remote period, was clay—the ooze of that river: the very same substance, levigated, perhaps, of which the stamped Baby-

lonian bricks are formed ; and the better sort of that pottery whose fragments abundantly bestrew the sites of Babylon and Susa, even at present—the potter's clay of the ancient prophets, and what is still used for the purpose of sealing* in some parts of the East. It may also be worthy of remark, that, of the various substances (such as waxes, pastes, &c.) on which I have tried to impress these ancient signets, I have found clay the fittest for the purpose both of receiving and retaining the impression ; and though a Copernican objector might argue here, that it is not the light of the morning which is turned, but the earth toward the light, yet this would be casuistry : the poet who wrote this wonderful book, probably believed otherwise ; or, if this point be still regarded as of any importance, it may be answered, So does the signet which is compared to the earth, in fact, turn (on its axis, during the operation of impressing it) toward the clay ; and if it be true, as Volney has asserted, that some of the oriental nations of antiquity believed the earth to be of a cylindrical form,† and have *so represented it among their hieroglyphics*, the metaphor will be still more complete ; and the words contained in our English translation of the preceding verse, “ that it might take hold of the ends of the earth,” be expressively correct, whether we regard the word *it* as referring to the light of morning, or as denoting that search-

* Mr. Harmer says, “ The doors of Joseph's granary in Old Cairo are kept carefully *sealed*, but its inspectors do not make use of wax on this occasion, but put their seal upon a handful of clay.” This may possibly have some traditional reference to the practice of Joseph himself ; since it appears from Mr. Harmer's account, that there is a lock on the granary-door.—*Harmer's Observations*, &c. vol. ii. p. 457.

† To pursue these wanderings of philosophy further than the tracks of their aberration may happen to lead toward the end of our own journey, would not be wise. Count Volney, perhaps, caught this idea from Eusebius ; according to whom (see book i. chap. viii. of his “ Preparation for the Gospel”) Anaximander derived this notion of the cylindrical form of the earth from Thales, and Thales probably from the Babylonian philosophy, or from that of Arabia, with which the author of Job was also well acquainted. But both Thales and Anaximander were of Phœnician extraction ; and as we find no corroboration of the notion of the form of the earth being cylindrical among the antiquities of Egypt, there is every reason for our supposing it of Babylonian or Æthiopian origin. It is, however, of no further importance to the object of our researches, than as it may contribute to shew that these latter countries are the real parents of that constellated sphere which modern astronomy has derived from the Greeks.

ing ray of Providence which brings moral turpitude to view. The latter, however, is the meaning to which the text before us has more especial reference. "*It* is turned as clay to the seal, and *they* stand or present themselves as a garment," means, that the wicked spoken of in the preceding verse, stand confessed, or exposed to view, like the embroidery of a garment at the approach of light.—Or rather, I think, when this verse is regarded, together with the preceding, the analogy is, that the wicked, and the dark contents of the engraving, are both cast off, as a garment is cast off,—a thing that has fitted and adhered.

It is the blending of the literal and the figurative meanings together, (which is done in all the translations that I have had opportunity of consulting), that has somewhat perplexed the passage, and conspired with their ignorance of cylindrical signets, and their non-advertence to the science of astronomy, to perplex also those commentators who have busied themselves in its explication. They have fancied that the seals of the land of Uz could be of no other form than that of the seals which are in modern use. But now that these revolving seals are produced, I should expect that the clouds of learned conjecture which have obscured the subject, would be dispelled, and the meaning of this mysterious passage, shine forth like the morning light in the superb metaphor before us: for, from the whole passage, when viewed with the signets, results an interesting and beautiful similitude between three dissimilar things; that is to say, between the light of morning beaming on, and passing round, a darkened world, and disclosing its contents; and that intellectual light, emanating from the Deity, which exposes in their true forms the dark deeds and moral deformities of the wicked;* and the operation of impressing one of these ancient cylindrical signets on clay, which bends as the cylinder revolves in delivering its impression, stands around it curv- edly as a garment, (till you flatten it while in a moist state,) and renders conspicuous to view the dark contents of the intaglio engraving.

* The words which in Job immediately follow these, are perfectly homogeneous with the explanation which I here venture to submit. "For from the wicked their light is withheld," clearly means that providence discloses the evil deeds of the wicked, by means of which their infatuation renders them blind to the approach. The remainder of the 15th verse is easily understood, and has no reference to our cylinders.

That there should exist a similar reference to a signet, perhaps to a signet of a similar kind, in another of the most ancient of poems;—that the Grecian lyre of Orpheus should respond to the Hebrew harp of the poet of Job,—is another curious fact which might serve to confirm (if such confirmation were needed) the justness of the poetical analogy before us. In the Orphic hymn to Apollo, or *the Sun*, that deity is addressed as possessing the signet which stamps the darkened world with the destined varieties of the seasons.—Dr. Dodd has rendered the passage,

————— “ Nature’s tribes,
No less than NATURE, to *thy* harmony
Owe the variety and pleasing change
Of Seasons,——

————— Wherefore *thou the marking-seal*
Of the whole world possessest.

And in a previous part of the hymn, whilst invoking the same celestial power, the poet says,

———“ The whole world’s *extremities* are thine :”

which is also in strict accordance with the stanza in Job respecting the day-spring’s knowing his place, that it might take hold of the *ends* of the earth.

But in justice to the author of the Hebrew or Arabian poem,—whichever it originally was,—I should not quit this text, without noticing also, the depth of *astronomical* knowledge which is contained in it, “ Hast thou commanded the morning since thy days? Hast thou caused the *day spring to know his place*, that it might take hold on the ends of the earth?”—when combined with that other sublime assertion of the power of Jehovah, “ His hand incurvated the flying serpent,”* it shews that the poet and those of his readers whom he immediately addressed, were informed of the *spiral path*;—that is to say, apparent annual path—of the sun through the heavens. The supposition

* Thus rendered by Dr. Good, with whom I have the pleasure to agree as to the astronomical interpretation to be put upon this verse. The immediately preceding words of the context, “ By his spirit hath he garnished the heavens,” no doubt led him to this conclusion, and can justly lead to no other.

that the author and his readers or hearers, were thus informed, gives emphatic and forcible meaning to the question, "Hast thou caused the day-spring to know his *place*?" because that place varies from day to day. In the vernal season, and at the remote era of the patriarch, the day sprung from the stars of Taurus; but in the summer season from those of Leo.

The justness and profundity of observation that is implied in the text; "By his spirit hath he garnished the heavens! His hand incurvated the flying serpent;" and the creative and presiding power of Jehovah, that is asserted and displayed in it; are not fully manifested, as the passage has commonly been explained.—Not that more is meant than meets the ear, but that what meets the ear cannot also meet the mind, unless it be astronomically regarded: and the generality of annotators have on the contrary, supposed the words flying, or "*crooked* serpent," (as it is rendered in the common English bibles), to allude literally to the incurvations of the serpent of earth.

I wish to impress this consideration, because the existence of the science of astronomy in the advanced state which this text presupposes, in the age and country of Job, is one of the strongest confirmations that could possibly be offered, of the soundness and truth of the principles upon which I shall proceed to attempt the explanation of the Chaldean hieroglyphics. "Upon this rock will I build my church."

I shall here beg leave to close my present reflections on the use to which these ancient gems were applied. I have the honour to be, &c.



ESSAY II. TO CAPT. ABRAHAM LOCKETT, SEC. TO THE COUNCIL OF THE COLLEGE AT FORT WILLIAM IN BENGAL, M. R. I. A. &c.

DEAR SIR,—More than a year ago, I had the pleasure of sending you my printed Letter to Sir Joseph Banks, on those cylindrical gems of Assyria, which you had the honour of bringing from Babylon to England; wherein I have endeavoured to shew that they are the kind of signets which were in use among the Sabæan* nations of remote antiquity,

* This word, which signifies worshippers of the stars, has been variously spelled, and by authors of high respectability. Among them are Hottinger, Jones, and Sir William Drummond. The last is probably right in affirming that *tz* at the beginning gives the true pronunciation: yet as this is unusual to English ears and pens, I have preferred *Sabæan* on the whole, thinking that he who has simplicity and Sir W. Jones on his side, cannot be far from propriety. A better reason may be, I had begun to print "*Sabæan*" before I thought of writing this note.

Sabæan is, by most lexicographers, derived from the Hebrew word for an *Host*, or from the proper name of the patriarch Saba, the son of Cush; but, by Wilkins, it is derived, with more probability, perhaps, from the Arabic *Sabâa*, a star, rising or coming forth. See his Arabic and Persic Dictionary, vol. i. p. 586.

and which are repeatedly mentioned in the Pentateuch, the book of Job, and other parts of the sacred Scriptures. That paper has subsequently been published in the *Archæologia* of the Society of Antiquaries; and sufficient time has elapsed since its publication, for me to have witnessed some of its effects, of which you will not, perhaps, be displeased to hear. Indeed, anything relating to these curious antiques, can scarcely fail to be regarded, at least with complacency, by him who, in modern times, has revived in Europe, and throughout Europe and Asia, is expected to gratify, a deep antiquarian interest concerning the remains, the history, the geographical site, and the remote customs, of ancient Babylon.

The effects of my *Archæological Essay* to which I allude, have been handsome and frank testimonials, both oral and written, from some intelligent antiquaries and scholars, amongst whom I have the pleasure to name your friend, Sir William Ouseley; the reverend and learned Secretary of the Newcastle Society of Antiquaries; and Mr. Frend, who some years ago distinguished himself at Cambridge by the firm stand which he made in favour of religious liberty of opinion. Meanwhile, others have said,—loud enough even for me to hear,—that they *always knew* the engraved cylinders were seals.

Of the gentlemen who have done me the honour to write on the occasion, it cannot but prove agreeable to you that I am authorized to mention the above by name. Sir William (in a letter addressed to me from Crick Howell) says, “It has gratified me much to find that my opinion in some respects, coincides with your’s. In others, there may, perhaps, be some little difference.” The Reverend Mr. Hodgson, addressing himself to Mr. Bewick, the celebrated artist of Newcastle, has the following passage: “I have seen Mr. Landseer’s *Essay on the Babylonian gems*. He is very right with respect to their use; and his interpretation of Job, chap. xxxviii. ver. 14, is, I think, very natural and ingenious. Their being intaglios, shews that they were intended for sealing with; and clay, instead of wax, has been commonly used in the East.”

You will read with at least equal satisfaction, that the cylinders and astronomical explications which I have shewn to Mr. Frend, have so far satisfied the well-known science and discernment of that gentleman, as to call forth those complimentary testimonies which you will find in his

“Beauty of the Heavens Displayed” for 1821, and which are too long to be inserted here.

On the whole, so many persons have expressed themselves favourably of the contents of my paper, as to afford me reason to suppose—not that it is free from error, but—that a large proportion of its readers are satisfied of the general truth of its allegations. Yet some few sincere and thinking persons I have met with, who freely acknowledge they “don’t above half believe it.”

For this incredulity there are two reasons: the first of which is, the sceptical *vis inertiae* which is generally in a direct ratio to the *strangeness* of an antiquarian discovery; and the second, that—as the subject appears to me at this distance of time—I have not above half explained the leading principles on which the discovery—if you shall allow it to be one—must finally rest.

Your residence, my dear Sir, in another hemisphere; and the delays and interruptions that have unfortunately been attendant on our intercourse; have prevented me from knowing how far I may indulge in the pleasure of finding our opinions of these mysterious and interesting remains of antiquity, coincident. Should we differ, it may not be too much to suppose that some sparks of light will probably be elicited from the friendly collision; and I shall endeavour to console the regret that must be consequent to such difference, in the belief,—the hope, at least,—that from the more complete developement of your opinions and reasoning respecting them, which will naturally result, the public will gain in information at least, as much as I shall lose in credit.

Whatever immature opinions I had formed on the subject at the time of writing my letter to Sir Joseph Banks, it now appears to me that my statement and explanation of the general *use* of these curious cylinders, of which alone I in that paper professed to treat, should have been traced upward as near to the origin and reasons of that use, as I might have been able to approach. And further, it appears that the anxiety I felt at the time of writing that letter, not to say anything of their *engraved contents*, lest I might chance to clash with your sentiments respecting them, withheld me from making those references, to history, to the original nature of signets, and to the ancient practice and purpose of sealing,

which are necessary to a complete elucidation of the subject of my researches. But this anxiety, with its consequent restraints, your late epistle from Calcutta has converted into a pleasing obligation, on my part, to say everything concerning them that I believe to be true, and that I think will contribute to the gratification of that very laudable curiosity on the part of the public, which is now beginning to shew itself both at home and abroad.

To return, then, to the further unfolding of these matters.—Though there be an established connexion, and one that is well understood, between signets, and the custom or practice of sealing; and between the noun *signet*, and the verb *to seal*, which expresses the use now made of signets; yet there is no such necessary connexion between them as should have led to confusion of the terms: so far from it, that, like *oath* and *swearing*, the words *signet* and *seal*, though now related by marriage, are of different philological families. But men are so much,—so almost entirely—in the habit of using the word *seal* both as noun and verb; of confounding, in their ordinary mode of speech, the impression with the matrix; and of considering the word *seal*, when used as a noun, and *signet*, as precisely identified in their meaning, that, by many, no suspicion even, is entertained of their meanings having ever been distinct; yet that they were so, and must have been so originally, I trust I shall be able to render manifest. In fact, I might here appeal from all languages to the natural constitution of the human mind. In the accuracy of its aspirations, the understanding of man absolutely requires this discrimination; and yet the absence of critical distinction in this case, as far as written language is concerned, must be allowed to be no new thing, for throughout the Hebrew Scriptures, the word חתם (*Chetham* or *Ghotham*) is employed to express both the signet and the impression from it; and the reader is left to collect which is meant, from the context, and from attendant circumstances.

Not that I intend maintaining that the signet was not used, and even originally invented, for the purpose of yielding impressions; or entertain the least doubt or distrust of the historical facts recorded in the Bible and by Josephus, where the use of the signet is mentioned. Of these will readily be recollected, that the King of Babylon closed up the en-

trance of the temple of Baal, and that of the den of lions, to which the prophet Daniel was consigned, by application of the royal signet; to which, in the latter instance, were added impressions from the signets of his nobles. The text here alludes also to the irrevocability of the seals of the Medes and Persians, by adding, "that the purpose might not be changed." Far from intending to express the smallest doubt of these and similar acts, I mean only that the word *signet*, in its primitive signification, carrying with it no advertence to such uses, cannot be derived thence, but is of more recondite interpretation.

SIGNET is from the same root, and belongs to the same verbal family, with *Signal*, *Ensign*, *Signature*, *Insignia*, *Assignment*, *Signify*, *Assignment*; and the root, or etymon, from which all these, with a long *et cetera* have grown, lies deep; far deeper than the later *Signum*, from which the dictionaries derive them, but which is itself derived, along with them, from the Hebrew root אִתְּ *Ath*, by some Hebraists pronounced *Oth*, but I believe more properly *Ath*, which, in our language, is rendered with sufficient fidelity, by the term *Sign*.

When I say Hebrew root, I mean that from which the idea or *meaning*, not the *word* signet, has grown. You will readily be aware, that I cannot here be intending to trace, with the etymologists, the progress of a sound from one language, age, and country, to another; but rather the progress or transmission of an idea, from the primitive ages to the present. Anything so anomalous, as that the English word *Sign* can have been derived from a sound so dissimilar as the Hebrew *Ath*, I cannot, I should hope, be supposed to mean. If our *word* *Sign* came from the Hebrew at all, it probably came, with the Greek ΣΗΜΑ, from שֵׁם (*Shem*), which is *Name*.

It may not be superfluous to mention, that I do not here treat of that ordinary sense in which the names of common things are the accredited signs of those things; nor of that other branch of the meaning of *Shem*, which the English word *Notoriety* would best express: but more reconditely, of mystic signs, prophetic of the future, or emphatically denoting the past.

I submit to your very superior knowledge of languages, that Park-

hurst, *in voce* כש, has fallen into the mistake of confounding the Hebrew word for notoriety and name, with that for sign; whilst D'Olivet, whose learned work on the Hebrew language, I hope has made its way to your Calcutta library, is directly to the purpose—tracing and transmitting the mystic idea, with a scholar's ability: Julius Bate meanwhile, not only expressly agrees with him in defining אוֹת “a sign,” but adds, “something to come,” which is, if possible, still more pointedly to my present purpose, though I conceive the word also to have occasional reference to that which is past.

אוֹת *Ath*,* or *Sign*, then, primarily meant, and still means—What? A mystic mark, denoting and bringing to mind something absent; or some immaterial essence intellectually apprehensible, but not cognisable by sense.

Perhaps few, if any, words, in any language, are more purely and essentially mental or metaphysical in their nature, than this; or more connective of the relations of material existence, with the soul of thought, and the phantoms or realities of the ideal world: of what is known, with what is unknown; and only guessed at, or credulously believed.

Hence it has always been a cardinal point,—in many instances the very pivot,—of mysticism. Hence, too, if we closely examine the individuals of this verbal tribe, we find them scarce earthly; something of a metaphysical character, and of the expansive force of mind—something of the mystery of immateriality, always seems to be in invisible attendance, “above, about, or underneath,” like the Ariel of Prospero's tempest.

To give a few examples of this:—what is a *signal*, but an appearance of mysterious import, known only to the initiated, but capable of exciting from them the most reverent obedience? In another sense indeed this

* Dr. Buchan has suggested a reason of some weight in favour of *Ath* and not *oth* being the true pronunciation of this word, א *Aleph* or *A* is the first letter of the Hebrew alphabet, (as of the Greek and most others,) ת *Tau* or *T* is the last. The character א placed between these in forming *Ath*, is not absolutely necessary, but when used, is merely a conjunction, or connecting hook: from the whole results an occult signification nearly similar to that of St. John the divine, in the first chapter of his Apocalypse, symbolising and denoting the means of connecting the first with the last, or the beginning with the end.

word *signal*, means a prodigy! An occurrence memorably wonderful! and denoting the invisible operation of superhuman power. Such miracles are throughout the Old Testament, regarded and spoken of as being *signs*, or sensible manifestations of the existence and power of the invisible Jehovah. When, in the eighth chapter of Exodus, the Lord orders Moses to stand before Pharaoh and threaten him with the infliction of the plague of flies, he commissions him to add, "I will sever in that day, the land of Goshen in which my people dwell, so that no swarms of flies shall be there, to the end thou mayest know that *I* am the Lord.—Tomorrow shall this *sign* be."

Again, what is an *ensign*? A flag,—I am answered,—or a symbolical image held aloft. But, what is it to the warrior's mind? What, but a conventional representative of unseen power? of power which is not, and cannot, itself be an object of sense. Too often indeed, (if such matters were here before our notice,) it is the mystic rallying point of unknown principles; and—to our better reflection,—the dangerous focus of ignorant force. Furthermore, what are *insignia*, but visible marks of royal, or other high authority,—invisible, inaudible, untangible, in its essence? And what is *signature*, but a sacred mental pledge, binding the future will itself of the signer; and being the outward and visible mark of that faith which in its nature is mental, and not cognizable by external sense?

To this family of words then belongs, and from this genealogical root springs, the word *signet*: its termination *et* meaning no more in the abstract, than advancement to the accomplishment of a purpose intended; which purpose, in the present case, is the manifestation of the sign:—or else this termination is merely a diminutive, like the *ette* of the French, in which case *signet*, or *signette*, can mean no other than literally a miniature *sign*.

It is well known that our Saxon ancestors, soon after the introduction of Christianity, when few men were clerks enough to execute a written deed by the subscription of their names, were accustomed instead thereof, as illiterate persons do at present, to *sign* with a cross; of which it may be said, either that they made the mystic sign of the cross, or that the cross which they made, was the sign of their plighted faith. It was the

ordinary mode of signature among the Anglo-Saxon Christians, who were, with regard to their inability to write, in the predicament of most of those Sabæans of old, whose signets, or instruments of signing, we are about to consider, and some of whom lived in all probability, before writing was invented.

It scarcely needs be added, that in both cases, as in the modern mode of signing by subscription of the name of the party, the signature was the sensible and permanent mark of invisible sentiment. Some confusion, however, must be allowed to have arisen between the meaning of the words *signing*, and *sealing*, which in legal deeds are now of consecutive execution; and it has arisen in the following manner.

In the dark ages which succeeded the overthrow of the Roman power, not only few men could write, but there were no artists capable of cutting seals; signature with the cross was therefore among the Christians, in a great degree a thing of necessity; though they sometimes made use of other ceremonies as signs, or tokens. But when art began to re-appear, and engraved stones to be raked up from the ruins of past ages, sealing was added; and as writing gradually became more known and practised, subscription of names came also into vogue, introduced at first, perhaps, by learned clerks, and by way of noting *whose* signature had ratified the deed that might be in question; for even Charlemagne was not penman enough to subscribe his own name, but was accustomed to sign with an antique gem, which had been set for that purpose in the pommel of his sword, saying as he impressed it, "What I sign with the hilt, I will defend at the point, of my sword."

Moreover, as the meanings of many words have been transitive, we cannot wonder that the superior pledge of faith, by the same degrees, came to be termed signing when applied to charters, treaties, or other bonds of written compact; especially as so it is, both virtually and in fact. The reader who is conversant in holy writ, will recollect many passages, of which it may be sufficient for me to advert to two or three, where the words *signet*, *seal*, and *sign*, occur; always expressing the meaning which I have here annexed to them—sealing being then understood as signing.

When the prophet Haggai writes in the name of the Most High, "I will shake the heavens and the earth! and I will overthrow the throne of kingdoms, and I will destroy the strength of the heathen!—In that day will I take thee, O Zerubbabel, my servant, son of Shealtiel, and will make thee as a *signet*! for I have chosen thee,—saith the Lord of Hosts." I say, when the heaven-commissioned prophet writes thus, he does not mean, as by ordinary figurative interpretation is generally understood, that God will take Zerubbabel, and make him as a seal; but more emphatically, that he will make him instrumental in conveying divine intelligence: a sacred denoter of mysterious and invisible things. All of which prophetic language, (according to some commentators,) relates to the important advent of the appearance of the Messiah.

For this reason too, when, as above cited, the gates of the temple of Baal were closed, and the king's signet was affixed, the impression stood there as the visible mark of "the divinity that doth hedge a king;" as a sacred sign it stood, rendering virtually present to the spectator's mind, that royal will and authority, which else were absent and invisible.

Nor was it thus in *Babylon alone*, but in all the great oriental nations: perhaps because they were all of Sabæan origin. The instrument which transferred the exercise of the royal power and authority from the king of Egypt to the young Hebrew interpreter from the prison-house, was the signet, (as mentioned in my first letter,) and in the Book of Esther we read, that it was not less the visible mark of the royal will, throughout the vast empire of Persia.

To the proclamation from *Susa* for the destruction of the Jews, the sign manual of the sovereign was affixed in no other way than by application of the signet,* which the king took from his own hand, and intrusted to Haman for the purpose: and when this proclamation was reversed, the king again took off his ring which he had taken from Haman, and gave it unto Mordecai.

* This particular signet of the Persian monarch was clearly a seal *ring*, and might, or might not have been of the cylindrical form. There is a small Sabæan signet of hæmatite thus mounted, at the British Museum, of which I shall discourse in a future page.

That Æschylus knew or believed that the signet was habitually used in Greece for the same sacred purposes, and was the customary appendage to written deeds, from the period of the heroic ages, (probably from the era of the invention or introduction of letters,) may be seen from his Tragedy of the Suppliants: where Pelasgus declares to the herald,—

————— “ This resolve be sure
Is strongly fixed, and never can be shaken :
Though not engraved on tablets, nor enrolled
In seal-stamped volumes.” *

But other instances, attested by those classic writers who treat of the heroic ages, may be recollected of the existence of signets among the more ancient Greeks. We have already heard the poet of the Orphic hymn to Apollo, complimenting that deity on his possession of “the marking seal of the whole world;” a poetical figure, certainly, but arguing the fact, that signets, apparently revolving signets, were well known in the age and country of the author. And there is a story in Pausanias† of Theseus, in questioning the parentage of the second Minos, occasioning him to throw his signet into the sea; which not only shews the existence of *Cretan* signets at the time, but that important appeals were made to them respecting *nativities*; a circumstance which will be found to be no slight corroboration of those future speculations on antique signets, which I propose to myself the honour of submitting to your notice. This event is stated to have happened about half a century before the Trojan war, and according to Pausanias, a picture of the subject by Mycon, once adorned the beautiful little temple of Theseus at Athens.

And with regard to the ancient,—the very ancient—custom of the *Arabian Peninsula*, two remarkable facts are observable: the first, that the further we are able to retrospect toward the remoter periods, the more we discover relative to the Sabæan signets: the second, that the oldest book extant, (which I believe to be that of Job,) should contain the most frequent allusions to them. In Genesis, the mention of Judah’s signet is

* Potter’s Translation.

† Attics, chap. xvii.

quite incidental, almost accidental, (one might say,) and perhaps an inadvertency. Indeed the whole of chapter xxxviii. appears a parenthetical interpolation; or has the air at least, of having been subsequently introduced, by some writer far more solicitous of genealogical accuracy, and the *naked* truths on which it depends, than of moral decency or the decorum of patriarchal example. But in Job, the references to the signet and its uses, are frequent, and in general not to be mistaken: nor does the circumstance of its being a Sabæan custom, appear to have interfered with the pure Deism of the patriarch. Graven images, it will be recollected, had not then been forbidden.

In some of these passages, however, the allusion to signets is more obvious than in others: of these, two are already adverted to in my first essay. Among those where the allusion is at first sight less evident, may be mentioned some verses in chapter xxxi.; where Job disputing in the forensic style with his compurgators, says,

—— “ Who will consent to summon me ?
There is my pledge—let the Almighty take notice of me,
 And let mine adversary write down the charge.
 Surely I would wear it on my shoulder ;
 I would wind it round me as a turban ;
 I would disclose to him the whole of my steps ;
 I would meet him altogether as a witness.”

This part of the poem, at least, is evidently of a dramatic cast, and I am decidedly of opinion, that when this great-minded challenge was uttered by the suffering patriarch, he threw down, or exhibited, his signet. The sense appears incomplete without such an act; and to what else can it allude?

Dr. Good pertinently remarks on this passage, that “ the real meaning of the Hebrew term on which it hinges, (יָתֵר) is a mark, gage, pledge, or a seal. A legal security given to fulfil a contract;” which is precisely in point. Whence Schultens renders the words, “ En signaturam meam!” and Parkhurst, “ Behold my gage critical!” In short, without palpable twisting of words, the passage can only be understood in one way,—namely, as the words, accompanying the act, of a man conscious of in-

nocence, and strong in virtue, who gives a signed *carte blanche*, and says, "write down what accusation you may think proper, and I will easily defend myself, even though it were before the tribunal of the Almighty!"

Taking this fervency, or energy of manner, into the account, the phrase "gage critical" has too much of critical refinement about it, and is at the same time too vague, for the time and occasion. It were far more natural for Job, in his excited state of mind, to have exclaimed, *Behold my signet*: but he did not so exclaim—probably because the flat-faced instruments of signature which belonged to the inferior* classes of society, were also called signets; he therefore habitually employed the term which was at once suited to his high rank in life, and specifically expressive of the *kind* of signet which he wore, and said, "Behold my revolver:" for it is here worthy of our best attention, that the literal "meaning of the Hebrew term on which it hinges," (to use the words of Dr. Good) is not merely a "mark, gage, pledge, or seal:" but, there is an implied circularity of some sort, in this term—either in the form, or mode of employing the signet, or both. The word is brief—suited to the expression of rapid thought: as it is written, it consists only of an Hebrew *Tau* and a *Resh*, (ת) which the learned Julius Bate interprets as follows; "To turn, or go about in such a circle, as a person who turns and looks about him."† It is in fact, the radix of our English word *turn*, and as it is very expressive of the revolving of a cylindrical signet, it is not unlikely to have been the pronoun used to denote such a signet, in the age and country of Job: indeed, if we carry our minds back to those primitive ages and countries where abstract scientific terms were not yet known, or were not cultivated, it is not easy to fancy as a familiar phrase, a word more appropriate, or characterising better a cylindrical signet, than would be a *Revolver*, or *Turn-round*, either of which is precisely tantamount to Bate's definition.

The Hebrew word which is here in question, (ת, *Tur*‡) sounds like

* Of these flat-faced signets, the reader will find some represented further on in the present volume. † *Hebraia Critica*, p. 720. ‡ This word ת, presents itself in other

parts of the sacred scriptures—for example, in the second chapter of the book of Esther, it is repeated twice—and in those places it means *turn*, and is literally so rendered in the Vulgate.

an ordinary, idiomatic, or colloquial expression; such as a *skilful* poet would adopt—because he always finds it in nature—when he wishes to represent the mind of his hero as goaded by undeserved suffering, or animated by persevering hope. It puzzles the learned commentators now, merely because the idiom of the language of Job is become obsolete. Should that of England at the same distance of time, share in the same fate, and should a learned commentator of four thousand years hence, arrive at such an expression in our poetry as,—There is my *watch*: or, Behold my watch: he will in like manner, be puzzled to discover that a watch was a chronometer, and the passage will be equally liable to misconstruction, with the present in the poem of Job.

And this seems to require that we return for a moment to the argument which I have faintly shadowed forth in my first Essay; and confirms me in the opinion that the passage in chap. xxxviii. should be rendered, It is turned as the seal to clay: or, applying it to Dr. Good's verse, Canst thou cause it to turn round or revolve, as clay doth the seal?

Considering all these circumstances, it is not difficult to suppose the gage, pledge, or signet,—which the patient and exemplary patriarch threw down, or exhibited, with an earnestness so noble-minded,—to have been one of those engraved cylinders, which are, collectively speaking, the proper subject of our present investigation; while it is not easy to imagine what else it could possibly have been.

Reverting to the earlier branch of our argument. It may not be thought less worthy of our best attention, that the modern word *oath*—an awful and mysterious term, by which society itself is held together so much more than by any other—that in my present view of the subject, it is almost literally the seal by which the bond of social compact is rendered valid:—a word, which, containing both the o and the a, seems to consolidate both the Hebrew modes of pronouncing or expressing a mystic sign; a word which is pronounced *ath*, or AITH, in the northern parts, and *oth*, or OATH, in the south, of our island—is from the same primitive radix: strictly speaking, it is that radix itself; and it still means what it originally meant,—namely, *a mystic sign become a sacred pledge*.

Again, the Greek name of the Egyptian god of signs, *Athothes*, proclaims its oriental origin, being literally compounded of *ath*, and *oth*, softened by a Greek termination. In Hebrew it was called, according to most authorities, *le Othoth*; and the Egyptian pronunciation is believed to have been the same—or perhaps *Athoth*, which, as their language died, lost the initial and became *Thoth*. It would seem that this deity was really no other than the inventive genius to whom society was first indebted, and will ever remain indebted most deeply, for the very means of mental consociation:—for signs, both celestial and alphabetic; and for oaths.

Among the learned authorities whom I have found it necessary to consult upon this occasion, the agreement which exists, is sometimes occult and mysterious, and sometimes more obvious and close. Perhaps the most explicit and illustrative account of the word *אֹת* (*Ath*), is to be found in the “*Hebraia Critica*” of Bate: who after defining it to mean *sign*, in the sense which I have lately submitted; treats of it as bearing literal and more immediate relation to the “accesses of the celestial orbs,” obviously meaning by *accesses*, the *approaches* of the orbs: and notwithstanding the word *accesses* be now in some degree obsolete in this sense, yet is it in itself more pertinent and expressive of what is really meant, than the word *conjunctions*, which modern astrology has substituted for it: because, the planets do approach, and retire, toward and from, each other—which were aptly contradistinguished by *accede* and *recede*, (or accession and recession,)—but they never conjoin.

To accumulate authorities beyond a certain degree may be useless: yet that any authority added to what I have adduced, will not increase the reader’s conviction, with regard to the mystic meaning of this Hebrew term, I cannot assume. The word, *אֹת*, first presents itself in the very first verse of the Hebrew Genesis, and in our English bibles it is translated “the heavens.” Why is it so translated?—Because, according to the belief of the Chaldeans and the writer of Genesis, the heavens consisted of mystic signs, or in other words, the mystic signs manifested by the accesses and recesses of the celestial orbs, *were* the heavens.

The Hebrew professor Alexander, in commenting on this first verse,

has the following observation, “**אֵל**, according to the Jewish commentators is always an implication; here it is a tacit inference of all the hosts of heaven; and in every other place it *implies something more than is expressed*.” I have dwelt the longer on these Hebrew terms, and have endeavoured to impress them the more permanently on the attention of my readers, (particularly the mystic references to the celestial phenomena,) on account of their importance to our future discussions.

Returning to the eloquent verses in Job;—should the critics inquire whether the art of writing was known at the time? and in what manner, if known; and on what substance, written deeds were executed? I apprehend that the following answers might be returned. That writing was known, is clear, not only from the existence of this poem, but also from several passages contained in it. In chap. xiii. ver. 26, we find “Thou writest bitter things against me:” in chap. xix. ver. 23, “O that my words were written in a book:” and in the present text, “Let mine adversary write down the charge.”—The substance on which written deeds were executed, is not certainly known. It might be the Papyrus, which according to Dr. Good, is alluded to in chap. viii. ver. 11, but is yet more likely to have been the skins of young animals, to which the clay impressions from signets would very well adhere. But we should not pass here some very sensible remarks of Parkhurst on this passage of Job, and on the particular point before us: “Linen (he says) is one of the oldest materials that ever was written upon, as appears by the bandages of the Egyptian mummies still preserved, and to this Job probably alludes in the passage just cited. This might readily be not only taken on his shoulder, but bound about his head.”*

An eminent scholar like you, (my dear Sir,) will not wonder that the Biblical and classical references here made, are to the customs of Babylon, Egypt, Persia, Greece, and Idumia, or Arabia, and *not* to those of the Hebrew nation after their Exody; notwithstanding that the word *Ath*, or sign, is confessedly an Hebrew word. But I write also for the public, and there are among the public, those who may possibly feel some surprise at this circumstance, and who may have no objection to

* Hebrew Lexicon, p. 501.

be informed that the reason is, Moses suppressed the wearing of signets, as personal appendages, on account of their connexion with the Sabæan superstition; though he did not, and perhaps could not, entirely suppress the word. His laws nowhere enjoin or require the use of a signet, and I believe there is no instance to be found of such use among the Jews, for several ages subsequent to their Egyptian bondage:—nor till their neighbourhood to the nations of Canaan, had infected them with the superstitious practices of the Sabæans; or in other words, had revived those of their Chaldean ancestors. After the frequent allusions to signets in the poem of Job, and after the mention of the signet of Joseph, whilst exercising the royal authority in Egypt, and that of Judah while he yet resided in Canaan, I believe that no more is to be read in the scriptures of signets, or small sculptured signs, as existing among the Jews, for some centuries; excepting their accidental mention (with the view of expressing intaglio engraving) in the Book of Exodus; again in the last of the Idyls of Solomon; and again in the passage which I have quoted from Haggai:—the two latter of which are reflex lights, as an artist would say; or what a logician would term, exceptions that prove the rule: for Zerubbabel, though an Hebrew by descent, and of the Levitical family, was a Babylonian by birth—and even by name, judging from its termination;—he was not only learned in the laws of Moses, but in the wisdom and sciences of the Chaldeans also: and Haggai did not prophesy, nor Zerubbabel officiate, until after the return of the Jews from captivity. And with regard to the allusion in the Song of Solomon, we should recollect that it occurs where the royal lover is addressing, or addressed by, his beloved shepherdess, the black beauty of Baal-hammon. Now Baal-Hammon or Ammon, (the aspirate being a common Hebrew redundancy) is a Sabæan appellation: the place was thus named in honour of the Sun in Aries, and I believe is the same that in the books of Kings and Chronicles is mentioned as having been built by King Solomon, and is there denominated Baal*-*Ath*. We are to bear in

* See 1 Kings, ix. 17, and 2 Chron. viii. 6. Whether this be the same place that is since called Baal-bec, I am ignorant. I believe Baal-bek in the Hebrew language, carries the meaning of Lord of the earliest or first, and the context shews that the geographical situation of Baal Ath, must have been thereabout.

mind that during the reign of that prince, Ammon or the Ram, was the first of the celestial signs—the *leading* sign, and more emphatically *the* sign, because it was the sign, or mansion, which *Baal*—that is, the Lord or Ruler (the Sun) honoured with his presence at the opening of the year.—*Baal Ath* (Lord of the Sign) and *Baal Ammon*, (Lord of the Ram) were therefore synonymous. When the reference to the signet in Canticles is considered under these circumstances, its mention will appear to have been dictated by local propriety, and to be a characteristic and poetical touch, whether sung during the period of Solomon's idolatry, when he was erecting fanes in honour of Chemosh and Ashteroth, or not:—I conceive the subject of what remains of the engraving on your largest cylinder, to be Ashteroth-Karnaim, leading onward Baal-Ammon: but of this I shall treat in a more proper place; here it would be digressing.

But I ought to notice here, that regal signets, used as instruments of authority in the signature and promulgation of public edicts, appear to have crept into use after the age of Solomon, and perhaps from the time when the monarchical power of Saul was superinduced on the republic of Moses. Whether they contained celestial signs, or more than verbal inscriptions of the names and office of the kings, is no where recorded; but with one of these, Jezebel appears to have signed her forged* letters to the elders: and in the time of the prophet Jeremiah, very particular mention is made of another signet, used as an instrument of legality in the purchase of a field,† from which it would appear to have been the custom of the Hebrew conveyancers in the reign of Zedekiah, to deposit a sealed copy of every deed of transfer of landed property, in some public office. Furthermore; the most important occasion of Hebrew sealing that is any where upon record, is that of the ratification of the new covenant by the “princes, Levites, and priests,” which is particularly detailed by Nehemiah.‡ Sealing is here obviously tantamount to signing; or rather *is* signing; and it seems pretty clear, from the specification of the names of the signing priests and chiefs, and from other circumstances, that among the Jews, the astronomical signets of the patriarchal ages had

* 1 Kings, xxi. 8. † Jeremiah, xxxii. 7, 8, &c. to 41. ‡ “We make a sure covenant and write it, and our princes, Levites, and priests seal unto it.”—*Nehem.* ix. 38.

by this time been superseded by signets bearing the respective *names* of their proprietors. It will be recollected that Nehemiah was cup-bearer to the Persian king, (Artaxerxes Longimanus, as is supposed) at the court of Susa.

That Moses decidedly purposed to abolish,—and did abolish—the use of portable signets, (such as were worn by their Chaldean ancestry,) among the republican Hebrews, is evident, both from what he has written,* and the silent, or ordained, substitution of other species of signs, ceremonies, and marks to assist the memory, which took place under him and his successor. In the decalogue, such signets as are here under our notice, are expressly forbidden under the phrase, “graven images.” And the astronomical hieroglyphics, or signs, from which they took their designation, and which alone constituted the subjects of these signets before the invention of letters, being, for very good reasons to which I shall presently advert, prohibited; verbal inscriptions, after the manner of the tablets of the decalogue, were in some instances substituted: upon other occasions however, signs, though not of the same kind as is displayed on the signets, continued to be used. On entering the promised land, the twelve chiefs of Israel brought, each on his shoulder, a stone from the bed of the Jordan, which Joshua set up “as a sign;” that when the Hebrew children of future ages should inquire of their fathers the meaning thereof, they should be informed of the miraculous passage of that river, which had been effected the preceding day. And the traditional purpose of this sign appears to have been fully answered, for the same chapter (iv.) of the book of Joshua, informs us that the stones thus placed, “remain unto this day,”—that is to say, the day when this part of the book

* “Many of the observances of the Mosaic law, which seem to be trifling, or to serve only to exercise the obedience of the Jews, were instituted in order to preserve that people from the idolatry and superstition of the *Zabii*; I think we may understand by that name, not only the Chaldeans, but all other nations also who were guilty of the like practices, by whom the Israelites were in danger of being infected; especially the Egyptians, among whom they lived so long, and the inhabitants of those countries whose land they were to possess, and in whose neighbourhood they were to be settled.”—*Dr. Long’s Astronomy*, ch. ii. The Professor supports himself by an host of authorities, amongst whom are Maimonides, Scaliger, D’Herbelot, and Spencer.

was written; and the manner of using these words, seems to imply that some considerable time elapsed between the date of the event, and the time of its being recorded. And in chap. viii. ver. 32, we read that when Joshua had advanced to Mount Ebal, he there inscribed on stones the law of Moses: but here the word *sign* is not used, (nor any equivalent expression,) because it has no reference to what is clearly, fully, and without curtailment, expressed.

The prime cause of the postdiluvian apostacies from the purer deism of Noah and of Job, appears to have been the ignorant confounding, by a superstitious people, of SIGNS, with CAUSES. From this source proceeded the idolatry which is at once disclaimed and reproved by the latter, in a sublime and often cited text, and which it also appears was in his time and country cognisable by the magistracy. "If, (says the venerable sufferer) I beheld the sun when it shined, or the moon progressive in brightness; and my heart hath been secretly enticed, or my mouth hath kissed my hand: this (also) were an iniquity to be punished by the Judge; for I should have denied the God that is above."* And on account of this prevailing heresy, Moses,—either by divine direction, or, finding that those whom he had undertaken to govern and instruct, were prone to sympathise in these idolatrous practices with the neighbouring nations of Canaan, Chaldea, and Egypt,—expressly prohibited their making unto themselves "graven images,—the likenesses of things in heaven above," &c.; and this at the very time that cherubim were permitted, and even ordained, to be exhibited in the tabernacle, and on the ark of the covenant.

Now, to have been made *to themselves*; that is, for each man to keep in his own possession whilst sojourning in the desert, these prohibited articles must have been small, to have been termed *likenesses of things in heaven above*,—objects of worship too! they must—at least, bearing in mind the pervading astronomy of this remote period, *I* find it impossible to come to any other conclusion—have borne some real or fancied resemblance to planets and constellations; and to have been *graven* images,

* Job, xxxi. 26, 27, 28.

they must have been sculptured on hard and durable substances, and sculptured in intaglio: we should recollect too, that such works are in the Bible, expressly and repeatedly distinguished from cast figures, or "*molten* images," as well as from such as were overlaid with beaten gold:—in short, these Chaldean engravings, and the portable part of the hieroglyphical engravings of Egypt, are the only productions that have descended to our knowledge, which at all accord with what is described and prohibited in the second commandment: and so intent do we find the great legislator of the Hebrew nation, to have been upon the accomplishment of this purpose—and so utterly incapable did he find the children of Israel, of distinguishing between causation and concomitancy—that, to enforce his prohibition, he even ran the risk of making Omnipotence appear jealous; Omniscience, unjust; and himself unreflecting, or uninformed.

Yet, in apology* for this wayward people, we may remark that the opinions and example of other nations at this early period—but chiefly no doubt, those of their Chaldean ancestry—appear to have had considerable influence on their character and conduct. From the cities of Ur and Babylon, northward, to the remote regions of Caucasus, and the Scythian nomades; and southward, to the shores of the Erythrian ocean—"the infatuated nations adored the sun, the moon, and the hosts of heaven. After men had lost the knowledge of the true God, it may easily be conceived that they fell into this species of idolatry." Under the serene skies of these Asiatic climates, "the attention of the people was naturally, and seems to have been continually directed to the observation of the celestial bodies; the movements of which soon came to be associated in their minds with the fates of individuals, and with the destinies of empires."† Here then, let us pause for a moment, and bestow a little time and attention upon that distinction between concomitancy and causation, which has been of so great importance to mankind.

Sir Thomas Brown, in his chapter on the dog-star and canicular days,

* I use the word apology here, in the sense in which Bishop Watson has written an "*Apology for the Bible*."

† Sir William Drummond's Dissertation on the 14th Chapter of Genesis.

lays down the distinction to which I would here solicit attention, in an able and perspicuous manner, of which the compressed substance is, that common opinion erred in making that a *cause*, which the wise regarded but as a *sign*: that the latter did not consider the rising and setting of the stars, as any part of causality, but of notice and signification of the changes of the seasons, and other terrestrial effects, such as the rising of the Nile:—as the customary signals or tokens of the approach of those phenomena: as unerring and faithful prognosticators of what was about to happen.

Hence the reliance of the Chaldean priests and shepherds of the first ages, was firmly fixed on these celestial oracles. They were infallible forerunners—not regarded as the causes, till astrologic piety became depraved; but in the expressive of Brown—“the *testifiers* of certain mutation.” Hence too, those asterisms of the celestial sphere, which lie in the zodiac, or annual path of the sun, were termed *signs*, and are so termed still, notwithstanding that astrology, which alone declares the reason why, is become obsolete. The graven images of the constellations were also signs or sign-*ets*; because they visibly, and in the light of day, brought to mind what could not then be seen: at night, the stars themselves were doubtless regarded as denoting the sacred will of Deity, as expressed in the order of nature—as outward and visible signs of the awful and mysterious volitions of that power, which in its essence is invisible, spiritual, and incomprehensible. Wherefore the prophet Jeremiah, in a solemn deprecation of the Chaldean idolatry,* declares, “Thus saith the Lord—learn not the way of the *heathen*; and be not dismayed at the signs of heaven, though the heathen be dismayed at such: for the customs of that people are vain:”—and when the writer of Genesis first mentions the stars in his account of creation, he speaks of them without the least ambiguity or hesitation, as being sensible marks of the will of Deity, as it developes itself in the ordained course of nature; and he emphatically says, or rather professes to repeat from the voice of Elohim himself, “Let them be for signs and for seasons,”—a sentence which is

* Chap. x. 2.

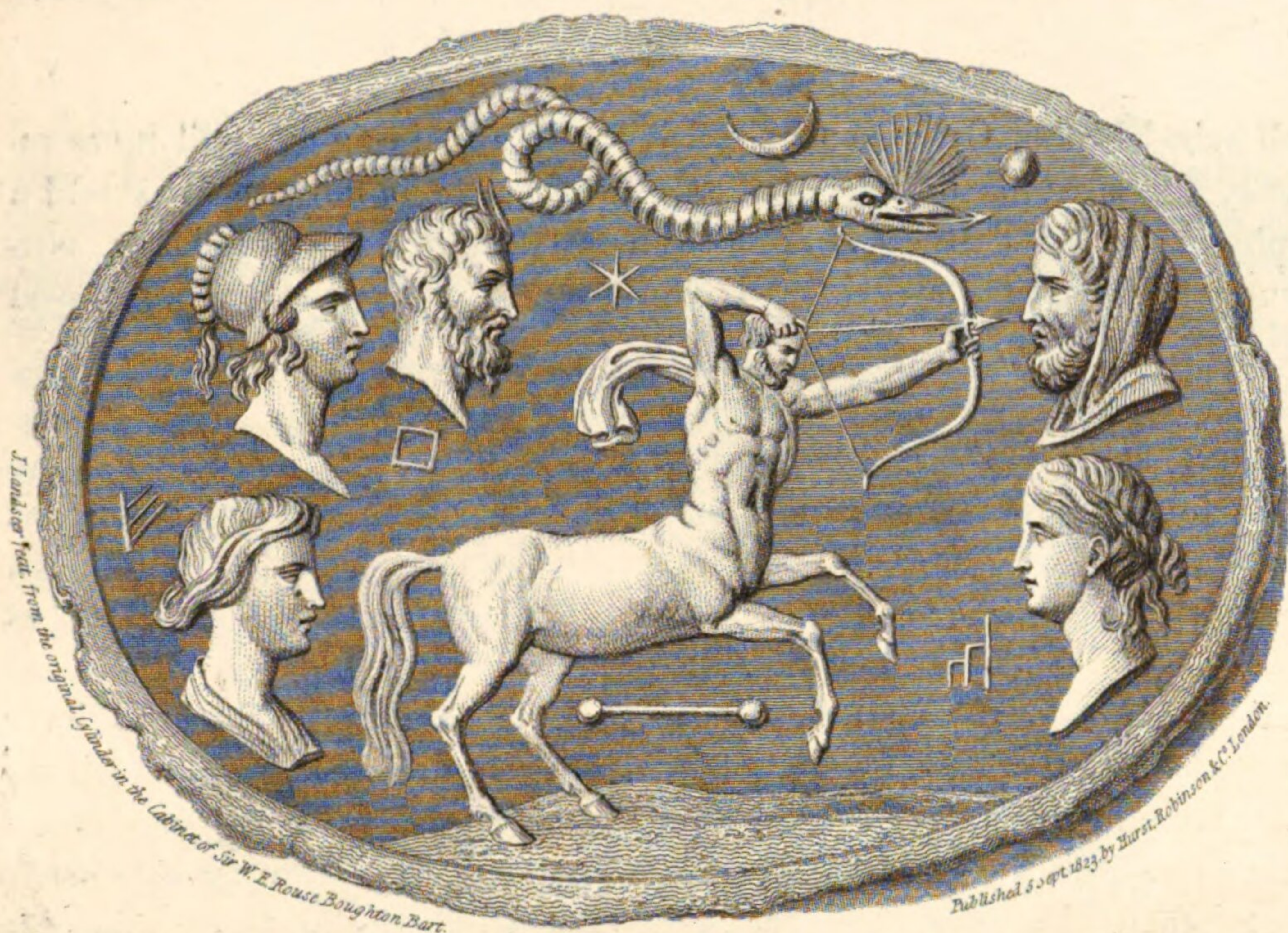
not only thus recorded in the Vulgate, and in the Septuagint, but also by Dr. Geddes, Mr. Parkhurst, Mr. Bellamy, and by all the translators whom I have had opportunity of consulting, excepting Mr. King, who nevertheless retains the same sense, if he does not strengthen it, by the substitution of *significators*, for signs.

I observe that the Rev. G. Townsend writes, in the Classical Journal, that Moses meant the words, "He made the stars also," (in Genesis, i.) as a lesson of reprimand to the star worshippers. It was certainly a simple and pertinent assertion of the superiority of the Abrahamic faith. It was like Aaron's serpent swallowing up those of the Egyptian magicians: and was like saying to the Sabæans, our God is the creator of yours. But the author of Genesis perhaps is still more profoundly philosophical, when he writes of the sun, moon, and stars; "Let them be for signs and for seasons." And the Hebrew text which has been thus rendered, whether or not it should be thought indicative of the Chaldean origin of this part of the scriptures, can only be understood to mean by the term signs, mystic marks or tokens.

In the primitive simplicity of those early ages, when the idea of systems of suns and worlds revolving through boundless space, had not been apprehended; wonder, the concomitant of ignorance, was strong; and as wild curiosity, and hope—the passions of childhood—felt no restraining power, it required but one enthusiastic step, to connect these sublime and unerring revolutions, with the little brief destinies of man: and this step was taken with the less hesitation, as the Sabæans had previously observed that the changes of the seasons, and the advancement and decline of the animal and vegetable portions of creation, were invariably connected with the risings and settings of the constellations.

But, my dear Sir, I must draw this protracted demand on your patience, toward a close. What is the general summary of the argument which its statements hold forth? Simply this: That to derive the word *signet* from the practice of sealing, would be an inversion of the natural order of the growth of thought and language: and that the engraved cylinders, and other gems, with which you have enriched the antiquarian world, and of which I am about to essay the explanation, became sig-

nets—instruments of sacred pledge; because, the devices, or subjects of them, were previously venerated as signs. To such of the Sabæans of old, as did not “look through nature up to nature’s God,” they also became mystic and imposing rallying points:—places of assignation, where sense and imagination assembled, and sometimes commingled incestuously; and where those monstrous chimerae of superstition, were engendered, of which some are about to appear in their true characters—namely, as the bugbears and dolls of infant man.



ESSAY III. TO CAPT. ABRAHAM LOCKETT, SEC. TO THE COUNCIL OF THE COLLEGE AT FORT WILLIAM IN BENGAL, M. R. I. A. &c.

You will not suppose, my dear Sir,—nor is any reader to suppose—from the contents of my last, that a Babylonian, or Sabæan of those early ages of which I profess to treat, devised, or chose, the subject of his signet, as a gentleman now chooses whether he will seal with an Apollo, a Diana, or a Jupiter. No. The devices appear to have been assigned to their respective proprietors, by a college of astronomical, or rather genethliacal,* priests; as the colleges of Heralds in these days, according to the rules or laws which regulate their science, assign to a gentleman his proper armorial bearings; which, by the way, are probably also of Sabæan origin; for the farther we travel backward into remote ages, the more we find the devices on shields to have consisted of stars, crescents, serpents, and other sidereal symbols. On the far-famed shield of Achilles (as every one knows,) were displayed the indefatigable Sun, the

* It is scarcely necessary to add, that genethliology, and astrology, were at that time and in those ancient countries, identified with the science of astronomy.

full orb'd Moon, Orion, and the Pleiades: and in an age still more remote, if Æschylus may be credited, Parthenopæus bore on his shield a Sphynx; upon that of Hippomedon was engraved a Typhæus, surrounded by twisted serpents; while the shield of Tydeus was impressed

“ With this proud argument; a sable sky
 Burning with stars, and in the midst full-orb'd
 A silver * moon.——

In fact, nothing seems more natural than for those who conceived themselves to be under the protection of certain stars or constellations, to engrave, paint, or emboss them on their *shields*; since these are at once the emblems, and instruments, of protection.

According to the well known passage of Herodotus which I have quoted in Letter I., *every* Babylonian possessed a signet: by which we may suppose is meant, every person above the condition of a slave—every one legally capable of exercising free agency. What were the devices, then, that were thus assigned and employed in Babylonia? Or rather, what is the system of principles to which those devices—speaking of them collectively—are referable?

From the inspection of a more considerable number of such signets than has perhaps been seen by any other person now living in Europe, and from the best thoughts which I have been able to bestow upon the subject, I am induced to answer, that in this astrological nation, and wherever the Sabæan superstition prevailed—the planet, or the constellation, under which each individual was born, or which at the hour of his birth† was culminating, or was ascending from the cusp of the horizon—was to him, what his patron saint is to a pious catholic.

* Potter's Æschylus. “Seven Chiefs against Thebes.” † I would not be uncritical here, nor more critical than the occasion may be thought to require. In writing “*under* which each individual was born, *or* which at the hour of his birth,” &c.—I wish the reader to bear in mind that ancient genethliologists disputed much respecting whether the state of the heavens at the hour of the *conception*, or of the *birth*, of a native, was most predictive. This can be of small importance to us, and is of the less, inasmuch as the asterisms which at the hour of conception are on the meridian, are precisely those which must of necessity be rising in the oriental quarter of the heavens at the hour of birth, (that is to say, nine months afterward). Wherefore, in treating of these matters, when I write simply the hour of birth, or to that amount, I shall beg

“How can we suppose (says Lucian) that Æneas was the *son* of Venus; Minos of Jupiter; Ascalaphus of Mars; and Autolychus of Mercury? All of them indeed were beloved by the gods. Venus beheld one, Jupiter another, and Mars another, at their respective nativities: for, whichever presided at the time of birth, was supposed to adopt the children, and form them after his own divine similitude in body and mind. Thus Minos was a king, under Jupiter; Æneas was beautiful, as born under Venus; and Autolychus a thief, from his father* Mercury.”

You may recollect here the legend related by Pausanias, and alluded to in my former epistle, of Theseus disputing with the second Minos concerning his birth and parentage, and appealing to the signet which Minos threw into the sea. Now, it would be inconsistent, not to say absurd, to call the first Minos the son of Jupiter, and the second, who was the known grandson of the first, the son of Neptune, upon any other principle or with any other understanding, than that which I am here asserting: that is to say, Jupiter was literally—not the father, but—the *god-father* of the first Minos, from his being born under that planet; and since there is no planet named after Neptune, I conclude that in the astronomy of Crete, (which is a very ancient astronomical country,) there must have been an *asterism* so named. In my remarks on an engraved cylinder, an outline of which has been sent to England by Mr. Rich, will be found my reasons for supposing that the stars now constellated as Erydanus, were originally known in different countries, by the names of Nile, Nereus, and Ocean, or Neptune.

This Thesean legend may be thought a fable. It is so in part: but is founded on fact.—Still, I may be asked, since so many of the engraved gems of ancient Greece have come down to us, where are their horoscopical signets? In travelling backward into the depths of time, I may be expected to assist my readers with some classical stepping stones.

That horoscopical signets were used by the Greeks, and even at a later period, by the Romans, may be easily shewn. The signet of the em-

of the reader to understand whichever his own astrological faith may incline him to. Enough for me, if I can shew that each horoscopical signet specifies or indicates a state of the heavens which once existed and may now be retraceable.

* Franklin's translation.

peror Augustus, was the sign Capricorn, which has always been esteemed to be the mansion of kings, and under which he had the fortune to be born. This signet is still extant, and I would have exhibited it here, but it is nothing more than the common fish-tailed goat, as it still remains in the modern zodiacs; and as it is sculptured in the field of the stone, in that very large gem of Augustus and his family, of which casts are sold at Tassie's, any person may easily see, or possess it.

A Grecian horoscopical signet it seemed more incumbent upon me to produce. Several of these may also be seen in Tassie's valuable collection: but with that curious one which forms the head-piece to the present Essay, I was favoured by the late Sir Charles Rouse Boughton, who obtained it from an antiquary of Avignon whose name I have forgotten.

A few words of explanation of this ancient Greek signet, will (as I presume) be no useless digression. It may excite the surprise of some that such signets have hitherto, in a great measure eluded antiquarian investigation; wherefore, though it be a step out of our direct road, it affords a prospect so interesting in itself, and so conducive to the end and purpose of our journey, that I cannot bring myself to fancy that such a movement will be attended with the least subsequent regret.

I should interpret that the five heads, or busts, which this engraving so conspicuously displays, were those of our five fellow planets, personified; the sun and moon being expressed without personification in the upper part of the ellipsis; and notwithstanding this interpretation will be attended with some difficulty, the reader may perhaps find it on the whole most worthy of credence,—subject however to certain modifications, concerning which he will of course exercise his own judgment.

It is better I think to state these difficulties, which arise from the gems belonging to that early period of Grecian history when the gods—or *disposers*, as Herodotus* says they were primarily called—of which Greece obtained the knowledge from Egypt, from Lybia, from Phœnicia, and

* “The Pelasgians, as I was informed at Dodona, formerly offered all things indiscriminately to the gods. They distinguished them by no name or surname, for they were hitherto unacquainted with either; but they called them Gods, which *by its etymology, means disposers.*”—Beloe's *Herodotus: Euterpe*, lii.

from Babylon—began to yield to, and in the devotions of their hierophants to be blended with, or superseded by, those—formed from a study of the energies of nature and the passions of man,*—which their early poets engrafted on the original Sabæan stock; and which gradually led them to deify almost every river, and mountain, echo, and even silence itself.

There are many circumstances concurring to persuade us that the dire conflict which has resounded through so many pages of fine poetry and ridiculous religion—those battles between the *original Titanian possessors of HEAVEN*, and the *gods of Greece*, was for no bi-forked mountain, and no upper region of clouds and ambrosia, but was simply—and far more consonantly to human experience—an ancient astronomical and sacred contest with the Sabæans, concerning the formation of the asterisms, and the names by which the planets and constellations should be severally known and adored—not that I intend launching further into this mythological ocean at present.

I beg to resume, that it will be our better course to attend to the more questionable points of this nativity in the outset. The two heads at the right hand extremity of the device, which I understand to be the oriental quarter of the present horoscope, I conceive to be those of auspicious omen to the native, Jupiter and Venus; by Ptolemy and Manilius termed “the two benevolent Fortunes.” I question not but that this will appear sufficiently evident from the mature majesty and beauty of

* “The primitive religion of the Greeks, (says Mr. R. P. Knight,) like that of all other nations not enlightened by revelation, appears to have been elementary: and to have consisted in an indistinct worship of the sun, the moon, the stars, the earth, and the waters; or rather of the spirits supposed to preside over those bodies, and to direct their motions and regulate their modes of existence.”

“At the same time that the regular motions of the heavenly bodies, the stated returns of summer and winter, of day and night, with all the admirable order of the universe, taught them to believe in the existence and agency of such superior powers; the irregular and destructive efforts of nature, such as lightning and tempests, inundations and earthquakes, persuaded them that these mighty beings had passions and affections similar to their own, and only differed in possessing greater strength, power, and intelligence.”—*Inquiry into the Symbolical Language of Art*, &c. ch. ii.

the countenances respectively: but the three on the other side of the Centaur, do not correspond to our ideas of Saturn, Mars, and Mercury; for though one of them is helmeted, it is beardless; and therefore rather a head of Pallas, than of Mars; another is evidently Pan, rather than Saturn; and the third is apparently a female head, and with no indication of its being intended for that of Mercury.

With this occidental triumvirate lies the difficulty, and the only difficulty that presents itself to a clear understanding of the state of the heavens at the hour, and of the genethliacal and technical meaning of this horoscopolical device. I can only solve it, or rather I can only state how it may possibly be resolvable—by supposing that the astrologer who cast this nativity, and directed the operations of the artist who engraved it, drawing his predictive inferences professedly from the state of the heavenly phenomena at the time, chose to ascribe military *wisdom* to the native, rather than mere martial propensity; for Pallas has but recently been admitted into our solar system. Moral, physical, and poetical *meaning*, it was their object, in these cases, to record and display; and we know, upon other occasions, how susceptible were the deities of Greece of subdivision, and of substitution of one for another. It is very common, in their most ancient hymns for example, to find them invoking their gods as “many-named” and “multiform.” In the 14th of the Orphic hymns, Jove is invoked as a “multiform deity;” in the 15th, Juno, as a “goddess whose names are numerous;” and in the 31st, Pallas is addressed as “multiform,” and as “*inhabiting the stars.*”

I think the same of the other two busts as of this of Minerva: that is to say, that they do not denote, integrally, planets; but particular aspects of planets, when viewed with reference to the surrounding phenomena, and interpreted according to the poetic system of the Greek mythology; for according as planets were “posited” in the zodiac, and as they “regarded each other,” (technically speaking), their meaning and influence was held to vary. And that this is no idle reverie, as applicable to the present signet, may be safely inferred from those diagrammatic marks which are engraved in the field of the stone.

Immediately between the bust of the “two-horned god,” whom I have

called Pan, but an epithet by which Apollo is addressed in the Orphic hymn to that deity, is the diagrammatical character $\square$ which still remains in use to denote *quartile aspect*; and a little before this bust, and between it and the lunar dragon, of which I shall presently treat, is the character $\times$ used to denote *sextile aspect*; both of which are unequivocally sculptured. There are two other of these ancient astrological characters, near the lower female busts, as may be easily seen, but which are become obsolete, or at least are unknown to me; nor can I find any thing bearing sufficient resemblance to them, in the various authorities that I have consulted, both MS. and in print,—to support me in venturing an opinion as to their meaning.

The central figure of a Centauric archer is undoubtedly that of the constellation Sagittarius, very conspicuously displayed. Beneath his body and between his fore and hind legs, is the ancient symbol of equipoise, Libra, or the Balance, just as we find it sculptured in repeated instances on the gems of Assyria, and of which I shall have future occasion to treat more especially. I interpret that one of these is meant to denote the asterism, whose stars were on and were near the meridian; and the other, those which at the hour of nativity were rising, or those which were simultaneously setting; for, taking for granted that this is a *Grecian* horoscope, and elevating the arctic pole of the sphere to any latitude between those of Crete and Macedonia—I here speak but in a general way, but—say to lat. 38° , which is nearly that of Athens,—we find the chief stars of Libra setting, as those of Sagittarius successively culminate, (or attain their meridian altitude); and of course as those of Libra come to the meridian, Sagittarius is rising. The two large and bright stars which have been named after the Dioscuri, set in this latitude nearly at the same moment; and this moment is a remarkable one, it being precisely as the meridian passes between the stars *Alpha* and *Beta* in Libra: now it is more than possible that the two beardless busts on the left may be intended for those of Castor and Pollux (supposing them to have been represented as adolescent Twins); in which case this horoscope is as complete as it is possible for such a document to be. I regret to write under uncertainty on this point; but it seems probable that any person who

may understand the mysterious characters before adverted to, will be able to inform us which of these is meant to be here exhibited as the existing state of the celestial phenomena at the hour of birth.

The ascendant stars have ever been esteemed of powerful efficacy, from the Chaldean ages to the present. If Sagittarius is now rising, as Jupiter is also in the oriental quarter of the heavens, and as Sagittarius is the proper domicile of this planet, the aspect would be prophetic of great future prosperity to the native, Jupiter would be lord of the ascendant, and would be posited in his mansion of power;—but considerations of this nature we are not called upon to follow up.

In the upper part of the gem is represented, (as I have already intimated), that astrological symbol of the monthly path of the Moon, which from time immemorial has been termed the Lunar Dragon. The number of rays which emanate from the head of this dragon-serpent is fourteen, that of the number of days of the moon's increase. At a short distance before this radiant head is a small orb, placed there, as I suspect, from finding the Moon where it is, by way of denoting, that though the nativity was nocturnal, the Sun was not far beneath the horizon at the time, nor far from Jupiter. The figure and place of the Moon herself agrees to this account, she being still a crescent, and removed but a short distance from the place of her ascending node—an important point in the casting of a nativity, which has always been technically known by the appellation of the Dragon's Head.

Again,—should this matter be thought worthy of further antiquarian pursuit, and as far as respects the bust of the warrior goddess:—In the hymn of Callimachus “to the bath of Pallas,” he invokes that goddess as synonymous with—that is to say, as a personification of—the earliest saffron coloured light of morning, which Dr. Dodd confirms in a note to his translation. This interpretation accords precisely with the place which I have here assigned to the Sun. Her Greek name, *Athene*, says the same learned and unfortunate annotator, is from the Hebrew אֶתֶר (*Ath*) and תְּנִי (*Thene*), a serpent or dragon, being a known emblem of light in its darting* motion.

* Hymns of Callimachus, &c. translated from the Greek, p. 146.

And these poetical constructions are in perfect conformity with historical fact; for from the testimony of Herodotus, it appears that the Greek poets were in his time, the astrologers also. In chap. lxxxii. of his highly valued *Euterpe*, he says of the Egyptians that, "from observing the days of nativity, they venture to predict the particular circumstances of a man's life and death: this is done by the *poets* of Greece."*

Now, between the Chaldean horoscopes which I shall exhibit, and this more florid horoscope of Greece, there exists much such a difference as we should calculate upon finding, between a nativity cast by a mere astrologer, and one cast by an astrological poet. Herodotus reckons that Hesiod lived not more than four centuries before† himself; and from the "*Works and Days*" of that poet, may be safely inferred that he could tell fortunes.

The introduction of this Grecian horoscope is somewhat episodical, and quite an after-thought of mine. Should it be found to lead the reader's mind more easily and agreeably onward, it will not, I trust, be thought useless or premature. Return we now into that broad road toward Babylon, from which we diverged at the point where Lucian affirms that the ancient heroes were no otherwise of celestial descent, than as the native of this Grecian horoscope may have been termed a son of Jupiter, or fabled to have been favoured or patronised by Pallas. Many of the ancient classic legends, which the poets of antiquity have worked up into metamorphoses, and other the most extravagant fables, may thus be more easily and intelligibly understood, and without outraging our ideas either of mortal or immortal natures. What was true in the Lucianic sense, of Minos and Æneas, of Phrygia and of Crete, may be yet more easily believed of the ancient Sabæan nations of Chaldea, Canaan, and the oriental Æthiopia: the Phrygians, indeed, are known to have been a Sabæan people, and Troy was in alliance with Babylon.

And here we may again look toward that more venerable testimony, to which we have before adverted with advantage: we may look toward the poem of Job, a monument which can scarcely be thought of without an apostrophe of admiration! We may look, with becoming reverence to-

* Beloe's translation.

† Ditto, *Euterpe*, Ch. liii.

ward that hoary and solitary pyramid standing amid the desert wastes of far distant time, and pointing to the skies!—The author of Job appears to have partaken of the early prevalence of the astrological or Sabæan system of belief, so far as that the stars were unto him for signs, but not for causes; and therefore, without reproach to his own piety, and without blemishing the sublime integrity of the deism of his hero; for we therein find Elihu appealing to the celestial phenomena as guides and criteria of human rectitude. “*Look to the heavens!* (he says) Behold and *contemplate the skies!* High are they over thee! If thou go astray, what doest thou against Jehovah? If thou be righteous, what canst thou profit him? To man like thyself is thine iniquity;”* but the heavens are thy guide.†

And as from the lips of the same Elihu, we read of the מַמְתִּים (Memitim) *Destinies*, and the מְלִיצִים (Melizim) *Intercessors*, with an ascending hierarchy of celestial natures,‡ which would appear to have received their several denominations from the astrological belief of their ministering between man and the supreme and eternal intelligence.

It may, however, have constituted part of the poet’s design, to exhibit the character of Elihu with local reference to his own country; for we are informed that he was a Buzite; which country, according to Jeremiah, was in the neighbourhood of Dedan,§ that is, in the south of the Arabian peninsula, or oriental Æthiopia—a country which, as I propose to shew in a future essay, has strong claims to be regarded as the birth-place of the science of astronomy.

It seems not unlikely that the astrological custom of the Chasdim, to which I shall presently advert, together with that other custom of theirs, (which may rather be termed astronomical), of watching the signs of the approaching seasons, by observing the rising stars in the crepusculum of morning, are both alluded to in the beginning of the third chapter of Job—

“At length Job opened his mouth and cursed his *day*”—

* Good’s version, xxxv. 5 to 8.

† It will be observed, that I have added these six latter words paraphrastically, and merely as completing and enforcing the obvious meaning of the author.

‡ Good’s version, xxxiii. 22, 23.

§ “Dedan, and Tema, and Buz, and all that are in the utmost corners; and all the kings of Arabia,” &c.—*Jerem.* xxv. 23.

I adopt here the excellent version of Dr. Good, and am decidedly of his opinion, that the *natal* day of the patriarch is here meant. We see also by the very commencement of the poem,—where the sons of Job are described as giving family entertainments each on his birth-day,—the high regard in which *nativities* were anciently held, and from which modern birth-day observances is probably deduced—

“ His sons were wont to hold a banquet house,
Every one on his birth-day ;
(When they sent and invited their three sisters,
To eat and to drink together with them.)
And it came to pass, as the days of such banquets returned ;
That Job sent for, and sanctified them ;
And made ready in the morning, and offered burnt offerings,
According to the number of them all :”—*

But I was about to request attention to the birth-day of the patriarch himself, as alluded to in the beginning of the third chapter—

“ Job opened his mouth, and cursed his natal day :
And Job exclaimed, and said,
Perish the day in which I was born !
And the night which shouted, ‘ a man child is brought forth !’
Oh ! be that day darkness !
Let not Jehovah unclothe it from on high !
* * * * *
That *night* !—Let extinction seize it !
Let it not rejoice amidst the days of the year :
Oh ! *that* night—
Let the *sorcerers of the day* curse it !
The *expertest* among them,—that can conjure up *Leviathan* !
Let the *stars of its twilight* be extinguished !
Let it not see the *glancings* of the dawn !”

I more than suspect that what has been translated “the sorcerers of the day,” about whom doubt is expressed by Dr. Good and by other commentators, were the astronomical priests, those of whom Julius Bate writes, that they did *charm* and *conjoin* ;† and the prophet Isaiah, that

* Good’s Job, i. 4. † Hebraia Critica, p. 181. To *conjoin*, was to watch for, compute, and anticipate, the celestial *conjunctions*.

they did *peep* and *mutter*; and concerning whom the latter ironically calls upon Babylon, "Stand up now with thine enchantments, and with the multitude of thy sorceries. Let now the astrologers, the star-gazers, the monthly prognosticators, stand up, and save thee from the things that shall come upon thee."* Those, in short, of this sacerdotal order, who at the time were on their stated nocturnal, or those who were on diurnal, duty; for the Hebrew word **הַעֲתִידִים** (Hhaotidim), which the author of Job uses in this place, means, the *prompt*, or *expert ones*; and I think, that the Leviathan here mentioned, was a *constellated* Leviathan—either the *Ketus* of the sphere, or perhaps the *Hydra* of the southern asterisms,—which the expertest among the expert ones might pretend to conjure up at the time when they knew that its stars would annually ascend from beneath the horizon in the twilight of morning.

We should not forget that it is Job—who was of the true faith, and not Elihu the Sabæan—that uses this expression, *the expert ones*; which is a mere acknowledgment of their dexterity, and none at all of their divine or miraculous power. We may well believe that the star worshippers themselves used a more reverend term; and it is remarkable here, with regard to *Leviathan*, that Theodotion has translated the word which is so rendered by Dr. Good, "the *Dragon*;" but the Septuagint have translated it "the *Great Whale*," which is literally the Grecian *Ketus*. It scarcely needs be added, that the expressions, "the *stars of its twilight*," and "the *glancings of the dawn*," with which the extract closes, are not only emphatically astronomical, but allude to the very time of the morning when the Chasdim watched with the greatest anxiety, and noted with the utmost exactness, the signs of the coming seasons.

In presenting you here with an astronomical foretaste, I am obliged to desire credit for what I shall have much opportunity to render manifest, namely, that the heavens were constellated at the early period when the poem of Job was written; and that many of its asterisms—surprising though it should seem—were in name and effect, the same which we behold on the sphere at present.

If we now transport ourselves in idea to the age and country of Job;

* Isaiah, viii. 19, and xlvii. 12.

which, by means of a pair of globes, or a map and an astronomer's globe, we may easily do; if we estimate the latitude of the scene of the poem, (in Arabia or Idumea), at about 20° north; if we elevate the arctic pole of the celestial globe accordingly; and if we assume that the supposed conjuring up of Leviathan must have taken place at one of the two seasons to which I have alluded above, (namely, when Hydra, or when Ketu, rose with the Sun), we soon discover that, in the given latitude, the cluster of stars in the head of Hydra rose heliacally with the earliest of *Leo*, which is that of the fourth magnitude in the Lion's nose; and that the *Cor Hydra* rose with *Regulus*; but if, as I should rather divine, the constellation of Ketu, or the Great Whale, be meant by the poet, the earliest of its stars rises heliacally in the assigned latitude of Job, with the star *Delta* in the ligament, or connecting band, between the Fishes; which, presuming (what I shall one day hope to prove to your satisfaction), the vernal equinox to have passed across the Hyades in the age of Job, must have been about two months previous to the Sun's arrival at the equinoctial colure, one month after his transit from the brumal solstice, and nearly in the depth of the Idumean winter,—a season which accords far better than the former, with the execrations uttered upon the distressing occasion by the suffering patriarch.

I anticipate with the greater confidence, the conviction of my readers on these points, since it has happened that a particular account of the Sabæan ceremony or local custom of the Chasdim,* upon these natal and astronomical occasions, has come down to us with their genethliological doctrines, and that these are in perfect conformity with the devices on the cylinders. At least, I see no reason to distrust on this subject a Roman physician and sceptical philosopher,† who lived at a time when the Chal-

* We are under so much uncertainty with regard to the pronunciation of the ancient Chaldee and Hebrew, that after all, the *Hhaotidim*, or *Chaotidim* of Job and Arabia, may be merely a dialectic difference from the "*Chasdim*" of other parts of holy writ, which word is by Sir Wm. Drummond, probably with more accuracy, written *Chasidim*. I do not see how this is susceptible of positive proof, as the Chaldee is now a dead language; but to believe it, calls for no over-weening credulity. The reader will determine for himself between this meaning and Job's acknowledgment of their expert conjuration.

Chaldaic Philosophy, p. 1047.

† Sextus Empiricus.—See Stanley's

dean and Egyptian modes of casting nativities were studied, compared, and criticised, and who says, "The way in which the Chaldeans (or Chasdim), *from the very beginning*, observed the horoscope of any nativity, was thus: A Chaldean sat in the night-time in his lofty observatory, contemplating the stars; another sat by the woman in travail until such time as she was delivered. As soon as she was delivered, he signified that event to him who was astronomically engaged, which, as soon as he had heard, he observed the sign then rising for the horoscope; but in the day, he attended to the ascendants and the Sun's motions." This is a valuable passage, and throws important light on our Chaldean monuments.

To the destinies, messengers, and intercessors of Elihu, the prophet Daniel has added the Babylonian עירין (Ourin,) or celestial *Watchers*: a term of later date probably than Job, but earlier than Daniel, since it is precisely significant of the same meaning with the *watchers* of Hesiod, whom he terms aërial spirits, and immortal spies, and enumerates at thirty-thousand. Our own Milton, vying with Hesiod, and with the Holy Scriptures, has encreased their number and the sanctity of their office, by writing that

" Millions of spiritual creatures walk the earth
Unseen, both when we wake and when we sleep :
———Oft in bands
While they *keep watch* ; or nightly walking round,
With heav'nly touch of instrumental sounds
In full harmonic number join'd ; their songs
Divide the night, and lift our thoughts to heaven."

From this primitive Sabæan source, obscure, like that of the Nile, by its remoteness—the copious fountain still flowing on through prolonged channels of human credulity—astrology has derived its leading doctrines; Angels being the supposed souls or spirits of the celestial orbs; and its faith in the heavenly phenomena being derived from that ancient, but firm, persuasion founded on the Chaldean,—probably antediluvian—dogma, that the stars were for signs. Hence it is, that modern practitioners of the science, in imitation of those of old, term their clients the

natives of their respective horoscopical stars, intimating by that word, the places of their several births in heaven, as it now implies in common parlance, their terrestrial birth-places: and hence the astrological priest who registered the birth of a Babylonian child, also cast his nativity; and in so doing, assigned to him the subject of his future signet.

Perhaps, before the invention of writing, this signet so assigned, was the ordained and sole record of the nativity; and hence probably, we find those signets which have risen again from their Babylonian interment; to consist, either simply of such zodiacal asterisms as were the mansions of Baâl or of Asteroth at the respective hours,—if hours were then,—of the births of their original possessors; or else of more elaborate compositions, consisting in some instances of the rising asterisms; in others of the setting signs also; and again in others, comprehending and adding to these (if I have rightly construed them) the several stations, hieroglyphically expressed, of those planets which were at the respective times, above the horizon:—In short, all the leading features, in all their mystic varieties, of those ancient Chaldean horoscopes to which we shall soon revert; and from which I conceive our Grecian signet to have been deduced along with the rudiments of Astronomy.

Of these three kinds, the first belonged to the poorer classes: the two latter, which are of the cylindrical form, and which have so long been treated with vague or perplexed regard by the learned in letters, belonged to persons of higher rank and condition, who may be supposed to have been able to afford more elaborate engravings; or, in other words, whose lucky stars at once entitled them to more display, and empowered them to indulge in it.

We will here pause for the present, principally for the sake of pursuing our theme with something like orderly progression, and clear ideas.



XLANDSEER FECIT. from the original CYLINDER brought from BABYLON by CAPT. A. LOCKETT.

ESSAY IV. TO CAPT. ABRAHAM LOCKETT, SEC. TO THE COUNCIL OF THE COLLEGE AT FORT WILLIAM IN BENGAL, M. R. I. A. &c.

I CONTINUE to address you, my Dear Sir, on the general topic of the antiquities of the Star worshippers, trusting that the road on which I labour, will gradually become sufficiently firm, clear, and even, for us to proceed to particulars without difficulty; and I begin a fresh Essay chiefly with the view of introducing, without derangement of my plan, an engraved representation of an impression rolled off, as well as I can now manage to roll it, from your very ancient and mutilated black cylinder—which will become the subject of those observations with which I purpose to close the present epistle.

But before I proceed further, I am induced, by finding the talismanic hypothesis asserted from a very respectable quarter which I was not at first aware of,—to say a few more words concerning that hypothesis; and also to make mention of a distinct species of signets of which some will subsequently be exhibited.—And first, with regard to the supposed Talismans.

We know that amongst the modern Persians, and even among some Europeans, it is fancied that these cylindrical gems are, and were from

the first designed to be, no other than Amulets (or Talismans)—Charms, to avert evil, or to educe good. Yet though this opinion prevails, to a certain extent, and notwithstanding it has long prevailed, in the East, I believe that nothing deserving the name of proof has transpired, to shew that they were originally engraven and worn with this view; and even no firm ground of argument, that I am acquainted with, for conjectures founded on superstitions of posterior date to the cylinders, can scarcely be esteemed argument at all. Neither are such talismans mentioned, that I know of, either in the Jewish scriptures, or by any of the more ancient historians.* I strongly suspect that this idea has arisen in the same way with the half-witted adoption of the Crescent by the followers of Mahomet. The Turks had no crescent waving on their banners, before they took Byzantium, of which it had become the badge or ensign. Being the symbol of the Phœnician Asteroth, (or Astarte,) and being subsequently venerated as the preserver of their metropolis, it glittered on the coinage of the Byzantines, and shone in their temples; and when the Mahomedan conquerors succeeded in gaining possession of the city—observing the crescent moon to be displayed in so many places, and instigated by the selfish craft that seems to be inseparable from superstitious credulity, they adopted the symbol † in the idle hope of deprecating lurking magic. It appears to me that, the same ignorant desire to propitiate unknown power, has blended itself with those Arabian tales of talismanic rings, which since the dominion of the Kaliphs, have been fondly listened to in the East; and has occasioned these engraved and perforated cylinders to be regarded and worn, in Persia and Arabia, as possessing some amuletic, or charming, virtue, of which no rational account is offered or expected. If external and visible things can be brought to flash on imagination, so as to excite inward or mental *emotion*, it is enough for the ends of superstition; which feels or regards only the emotion, or leaves the rest to be moulded by its officiating

* The fabled ring of Gyges, which some might suppose to be an exception, must be an invention of subsequent date; since Herodotus, in relating the romantic story, makes no mention of the talisman.

† Historia Byzantina Constantinopolis Christiana, lib. i. p. 7.

priests. The reason that would ascertain its precise nature, would dispel the mysticism in which it enshrines itself.

But I observe, that, on the European continent, these antique cylinders have been called amulets, by Count Caylus, by D'Olivier, and by Millin; if not by Grotefend and Lichtenstein; as well as here by Raspe and other antiquaries of respectability. I suppose the consideration that has struck Mr. Hodgson and myself, did not occur to them—namely, that the execution of the engraving upon them, being in intaglio, shews they were intended for the purpose of sealing: which indeed is yet more plainly shewn by the circumstance of the groups of nails, or arrow-head characters, that appear on some of them, being engraved the reverse way from that in which the same characters appear on the bricks of Babylon, and on those other Assyrian monuments which were unquestionably intended to be themselves read, and not read in their impressions. To the subterfuge, that the *impressions* from these gems were amulets, the above gentlemen, or any other, will be welcome, if they shall think it worthy of adoption, after what I shall have to submit respecting them as horoscopolical pledges of individual citizens, and seals of the priesthood.

Indeed when we come to recollect that astral influence, and amuletic power, were both venerated as being mystical and occult, in those ages when the human mind bent under the imposing witcheries of those who pretended to employ them, and are now regarded as alike delusive, there remains little reason to quarrel about a term. All that I mean to deny is, that these engravings were by their authors ever supposed to possess any such latent energy of causation—any such talismanic virtue, or power,—as the Genii of the spiritual world were supposed to be compelled to honour and obey, when their firm was drawn upon; at the pleasure of the holder. I further deny that they originated with those ages of Arabian romance, of which talismans and genii constitute almost the whole of the miraculous machinery; and I affirm that they belong to a far remote period of time. However, while I contend for the true construction of solid and lasting existences, and disclaim to quarrel about a term of transitive meaning—I am ready with such concession as may be ex-

tracted from the next paragraph, if it will conciliate that "little difference" which your excellent friend Sir Wm. Ouseley, is candidly pleased to state, may perhaps exist between him and myself.

Among the definitions or descriptions of talismans that have fallen in the way of my reading, is that to which I have made slight allusion in my first essay, and which rests on the authority of Philo and Dr. Hyde. It states that, the father of the patriarch Abraham was a maker of "*Talismans, or little images framed in some planetary hour.*" In point of fact, if we reflect on the words which I have printed in italics, here is little or no difference between Philo, Mr. Costard, and myself. As little images cannot be sculptured or engraven in any planetary *hour*, we may be tolerably certain that the meaning here is that, said images have some kind of mystic references to planetary hours: and, to *frame* an horoscope, is still technical. I am therefore only somewhat more particular on the leading points, than the above authorities. I discourse of little *graven* images; I tell in *what* planetary hours they were framed; and I maintain that they originated with that most ancient of superstitions which was prevalent in the time of Terah, and whose post-diluvian professors peopled the banks of the Tigris and Euphrates, extending themselves southward to the shores of the Erythrean ocean, and, as they themselves knew or fancied, deducing their faith with their ancestry, from *Saba*, from Enoch, and from Seth.*

While I write *fancied*, I readily allow that none else could have known so much of these very ancient matters, as the post-diluvian Cushites, the immediate descendants of Noah and the men of centuries. And who shall now suspect those of dissembling or romance, to whom we are indebted for all that we know or believe of the ante-diluvian world?—But, let us not lose in sublime speculation, the thread of our disquisition. I must still contend, for another moment, against the use of the word *talismans*, as a correct expression in the present case.

No poet is more accurate than Pope; or more critically nice in his choice of terms: and Pope, while he makes a distinction between talis-

* Wilkins's Arabian and Persian Dictionary, vol. i.

mans and signets, *implies* my meaning,—better perhaps than I have *expressed* it—in the following couplet:

“Of talismans *and* sigils knew the power;
And careful watch’d the planetary hour.”

Dismissing then the talismanic, or amuletic, hypothesis; which hitherto, by throwing its fanciful Arabian spells over the learning, has only deluded the penetration, of Europe,—my belief is, that the Babylonian, or pious Sabæan of old—in affixing an impression from his signet to any legal deed, or, in the higher periods of antiquity, ere the light of letters had dawned upon mankind,—by employing it as a sign, whereby the fixed attention of present witnesses as well as his own, might be impressed with, and retain with more precision, the terms of any oral covenant—pledged himself by his tutelary constellations or planets; and by his faith in his future terrestrial destiny, to the fulfilment of his contract or promise; just as the Anglo-Saxon Christian, to whom we before adverted, signed the symbol of *his* religious faith and future hope, as the pledge of his present sincerity. The only difference in principle was, that the Saxon pledged his hope of eternity, while we have no reason to know that the Sabæan had attained to the knowledge of the immortality of the soul.

The signets of the lower classes, as well as those of their superiors, are engraved on hard and imperishable substances; or stones which would have been so pronounced, had not some of them evidently suffered either from long burial in the earth, or from the mere lapse of so many centuries. These stones—(chiefly agates, carnelians, and garnets) are of inferior beauty, and also, generally speaking, of inferior depth and workmanship, to the best of the cylinders. They are plano-convex; some of hemispherical, and others of hemispheroidal, proportions, having the upper part of each perforated for the sake of portability, and on the flat faces or bases of which, the several zodiacal signs are engraven. Of this inferior species of signets, I propose to treat further, and shall also exhibit some representations, in a subsequent page of this work.

The cylindrical signets however, did not all belong to individuals;

though they all belonged to the same star-worshipping system of superstition. The historian whom I have cited above, in proof that every Assyrian possessed a signet, alludes also to another distinct species, of which some will fall under our critical consideration.

From what Herodotus has left us concerning the Assyrian rites and ceremonies of religious worship, it does not appear that he was present at any of their sacrifices, as he was at those of Egypt. Probably his longer residence and superior leisure in the latter country, might afford him opportunities which he might not enjoy at Babylon—or it may have happened that the details which he may have written of those matters, have not been transmitted. He undoubtedly promises more respecting Babylon and Assyria, than has reached to modern times; and in that promise mentions the Babylonian temples.*

However this may have been, we may be pretty certain that wherever the Sabæan rite of sacrifice prevailed—and in the early ages it prevailed almost every where—the general outlines, and even many of the minor details, of its attendant ceremonies, were the same; or so nearly the same, that the mode of conducting the sacrifices of Assyria and Canaan, may be very well judged of by what this venerable historian has left on record concerning those of Egypt; where also a few cylindrical signets have been found; but where the national—or at least the more prevalent—form of the signet, appears to have been quite of another kind.

In enumerating the religious ceremonies of that extraordinary people, Herodotus states that, “the Egyptians sacrifice bulls *without blemish*,” and that, “the priests carefully examine whether the victims be perfect, before they are led to the altar:—If found to be free from those imperfections which are specified in their sacred books, the priest fastens the byblus round the horns of the bull; he then applies a *preparation of earth*, which receives the impression of his signet, and the animal is thus led away to slaughter: and this seal (adds the historian) is of so great importance that, to sacrifice a beast which has it not, is deemed a capital offence.”†

To compel Plutarch to support the testimony of Herodotus, will pro-

* See Clio, clxxxiv. and again in excii.

† Beloe's Herodotus, Euterpe, xxxviii.

bably be regarded but as a penance, and an atonement, due to the offended majesty of the patriarch of profane history.—The learned biographer confirms the reputed importance of this sacred sealing, by stating that the Egyptian priests who performed the ceremony, were an express order, and were termed *Sphragistæ*.^{*} And the same kind of collateral light which is thus thrown from Plutarch on Herodotus, streams also on holy writ from the usage of Egypt; for we find the precept which regards the immaculate purity of the victim, and indeed the very expression (“without blemish”)[†]—which Mr. Beloe has used in translating Herodotus,—frequently repeated in the laws of Moses. The hand of the officiating priest imposed on the head of the victim[†] (as ordained by this great legislator) being only another outward sign of sacred meaning—afforded a ready substitute for the use of the signet, and an easy mean of accomplishing its abolition among the Hebrews, with the least possible violence to the prejudices which long established usage never fails to inspire.

But why was the impression of the signet at the seasons of sacrifice, regarded as of so great importance? and why did the priest previously examine the victim with so much of solemn scrupulosity?—Doubtless because a sacrifice to a deity, should be immaculate: what is impure, being obviously unfit for the gods; and because (as is before stated) the seal was the visible mystic mark or *sign* of something which could not itself be an object of, or subject to, corporeal sense.—And what was this something supposed to be?—Certainly it must have been either *consecration*, which is an object of mental appreciation, faith, or belief:—Or, it was the presumed implication of *acceptance* by the deity to whom the sacrifice was offered. It was in short a species of sacrament; and like that ordained by Jesus Christ, it required and pre-supposed the purity of the offering.—It will probably here be recollected, that in the Catholic church, the holy wafer, which is the outward and visible sign of this divine ordinance, is still impressed by the signet of the priesthood.

^{*} “Those among the priests that were termed *Sphragistæ*, or the *sealers*, were wont to seal the beasts that were to be offered.”—*Translation of Isis and Osiris in Plutarch's Morals*, vol. iv. p. 89.

[†] For these facts, see, among other places in the Pentateuch, the 3d and 4th chapters of Leviticus.

It may be worth the reader's notice in this place, that with respect to the substance which received the impressions from the signets of the Sphragistæ, Herodotus agrees with the passages I have quoted from Job; with the Shah-nameh of Ferdosi, which mentions clay as the sealing substance of Persia; and with every authentic account that I have met with of the material anciently used in the East for this purpose. It is indeed more than possible that sacred sealing may have been the origin, or have helped to suggest the custom, of sealing in the case of civil contracts or covenants: for in the institution of new usages, some connecting advertence is necessarily made to those which are already established, and it seems natural, that after the invention of writing, the priestly scribes—who were then the legal scribes also—would perceive and enforce the propriety of accompanying transfers of earthly property, with a ceremony bearing some resemblance to that which was already in use on these occasions of heavenly transfer.

A little reflection will be sufficient to satisfy the critical reader that he must not indulge any feeling of disappointment,—if any he should at first experience—on finding our more ancient Sabæan personifications of the planets—or souls, spirits, or angels, of the planets, as they are variously termed by Gaffarel and other writers—inferior to the refined forms which, several centuries afterward, graced the gems and the coinage of Greece and Rome. The head-piece to the present essay, for example, must not be expected to rival its immediate predecessor. The rudeness of ancient Babylonian art, must rather be received in circumstantial proof of the authenticity of its productions. Nor, finally, must the reader expect that the primitive asterisms of the celestial sphere of Chaldea—if any should happily emerge to modern notice—will much resemble those which are at present in astronomical use.—He must rather prepare himself to perceive, that, in point of rude simplicity, they will be as remote from the constellations which are sculptured on the antique sphere of the Farnesian palace, as those are from the asterisms which are delineated on the best celestial globes of the present day. If such be the tone of his general expectation, I can meet him with confidence; and can even anticipate some instances in which he will be affected with very agreeable surprises.

Returning to the course of our reflections on your largest cylinder : from the comparatively large dimensions of that gem, and also of those in the British Museum that are designed and engraved in a similar style and on a similar substance (and of which I purpose to treat at a future day); from their exhibiting worn or decomposed surfaces—in some places almost to obliteration; from their being alike in these respects; and alike partaking of the rude clumsiness which is incident to all early mechanical contrivance—it seems fair to infer that they are all of very remote antiquity: some of them perhaps several centuries older than the most ancient of those which bear the remarkable inscriptions in the arrow-head, or Assyrian, character.

The substance of these cylinders has been thought to be black basalt. I believe it is so termed by Raspe: But from better mineralogical information, I am led to think it is the stone which afterward becomes carnelian, in the state in which it is dug from the mine, and before its native colour has been changed by the action of fire: it has however also been termed black jasper, by very good judges.

When you reflect, my dear Sir—and when my other readers are informed—that this largest black cylinder of your's, as well as both those which once belonged to Charles Townley, Esq. and now repose in the British Museum, are considerably larger than those which bear inscriptions; being nearly twice as much in circumference as your largest chalcodony, and more than three times as much as that very ancient and curious jasper which you presented to Sir Wm. Ouseley, and which I have copied as the ornament of my title-page—you will perhaps be of opinion that they are of a date anterior to the invention of the Assyrian alphabet, or syllabery, (whichsoever it may be) since it is not reasonable to suppose that their authors would have crowded two, three, or four, columns of inscription, where there was less room for it; and have omitted verbal inscription altogether, where there was more, and where it was more imperiously required by the recondite character of the device—had they possessed an art of writing.

Not only the uncouth style in which these works are designed, but the peculiarly rude mode in which they are executed, also attests their extreme antiquity: for neither the operation of the lathe and wheel, nor

that of the drill-bore (the *terebra* and *rota* of Pliny) are here traceable. The manual part of the engraver's work, as far as can now be seen, appears to have been performed by mere dint of friction—perhaps with fractured and cut diamonds, adamantine spar, or other exceedingly hard substance, with small aid of mechanism in its mode of application. Even the longitudinal perforation of *this* stone agrees to the above account; for it is not straight, and is but inartificially performed. If this gem has ever been mounted with metal, according to the general hypothesis of my letter to Sir Joseph Banks, that metal, can only have been introduced at either end, penetrating perhaps half or two thirds of an inch, without passing *through* the signet.—But, on further reflection, I rather think that the more ancient mode of portability, was attachment by means of thongs or other strings, to the walking staves of their respective possessors.

I think so, not only from careful inspection of the cylinders, and from reflecting on the great difference in dimensions, weight, and apparent age, between the largest and the smallest; but also from recollecting that both Herodotus and the writer of Genesis, speak of the signets and walking-staves, or sceptres, *conjunctively*. In Clio, cxcv. Herodotus writes as mentioned in my first essay, that every Babylonian possesses a *signet and walking staff*, or sceptre; and I observe that Dr. Geddes has rendered Genesis, xxxviii. 18, &c. “What pledge shall I give thee? *Thy signet*, said she, *with thy riband and the staff* that is in thine hand:” and again in verse 26, he makes Tamar say, “Discern I pray thee to whom belong this *signet, riband, and staff*.” The mention of the riband—which I could almost venture, in controvertence to my authorities, to call a thong*—seems to be introduced with no other view than as the connecting ligament between the signet and staff: Why else should it have been mentioned?—Indeed if the signets with which patriarchal shepherds travelled on foot in the land of Canaan, were three inches in circumference and two in length, like that which is here under notice, I don't know a

* This word, פתיל (*Pathil*) in the original, should be enshrined by the scholars of the Bryant school, among the glorious uncertainties of ancient literature. It is rendered *riband*, by Geddes; a *cord*, or *twisted string*, or a *tape*, by Gussetius; *cloak*, or “*tire of thine head*,” in the old translations of King James's time; and by Bellamy; and in the common version—*bracelets*!

less inconvenient way of carrying them about, than by attaching them to staves or sceptres, in the manner in which we see in old pictures, small cruses suspended to the walking-staves of pilgrims.

The further and the more accurately we carry our retrospections into the motives and details of this hasty and imprudent transaction, the more does the local custom, and the meaning of the passage with regard to the mode of portability of the more ancient Sabæan signets, disclose itself; and the less susceptible does it appear of any other. No woman under such circumstances as Tamar, far less one allied to the patriarchal race, would have required a walking staff, much less a pair of "bracelets," in addition to an article so valuable as an engraved gem—as a pledge for a kid; and no foot-traveller on a journey, would have parted with his staff, had that and the signet been already separate, or easily separable; but would rather have replied, No,—I want my staff to protect and assist me on my journey, and the signet alone is of far more value than a kid:—In short, it is almost impossible to conceive that the trivial riband and staff would have been mentioned at all, had they not been connected with the signet. The way-faring genial impulses of Judah, appear to have been pretty much like those of other men, with the generality of whom upon such occasions, the most prompt preliminaries find a ready preference.

"Thought would destroy their Paradise."

The observations of Bishop Newton on the sceptre of Judah, may here be referred to with some advantage. In the Hebrew language (as in the Greek of Herodotus) the same word שֶׁבֶט (*Shebet*) signified both sceptre and staff, "particularly (says the Bishop) the rod or staff which belonged to each tribe as an ensign of their authority."* The magiste-

* Dissertations on the Prophecies, vol. i. p. 52, 8vo. edit. Parkhurst's explanation of the word שֶׁבֶט is virtually the same. See Heb. Lexicon, 6th edit. p. 713. He adds that "each tribe of Israel had this ensign of authority belonging to them." We might perhaps have supposed the engraving on the signet, to have been itself the distinctive mark of each particular tribe; but that Herodotus seems to bar this supposition when he states that every Babylonian sceptre was headed with a pomegranate, an eagle, a lily, or some other carved ornament; to use a sceptre without which, was unlawful. I assume here that the Babylonian and Hebrew customs, being the same, were of the same remote Assyrian origin.

rial staff of each of the Hebrew tribes, then, must have been distinguished from an ordinary walking stick, by some *אֶת* (*ath*) or mark bringing to mind the magisterial authority of the head or leader of the tribe; and though in the days of Judah and Tamar, the Hebrew tribes were but beginning to sprout from the parent stock, yet the *Shebet* of Judah himself, probably bore that mark which afterward distinguished his tribe—the *sign* of the tribe being taken from the *signet* of the patriarch. It is not improbable that the zodiacal Lion, of which (as the future pages of this work will shew) the Chaldean cylinders afford several repetitions, is the scriptural “Lion of Judah”—the same which he bore on his signet, forming either the whole or part of its device, assumed, or ordained, at first perhaps for no other reason than because he was born under the sign Leo, it being the ancient usage of his Chaldean ancestry, to pledge themselves by their native stars—by those stars which were honoured by the presence of Baâl, or which were ascending from the horizon, at the times of their respective births: hence probably the allusions to the Lion in that part of the death-bed prophecy of Jacob, which concerns his son Judah; hence too that self-opinion which supported the royal and warlike character by which the tribe of Judah was in after-ages distinguished.

I remember to have heard you say that, after a shower of rain, those who inhabit the neighbourhood of the Babylonian “heaps,” walk forth to look for gems among the crumbled fragments of the ruined edifices of that great metropolis, which gems, after such rain-falls, and whilst they remain wet, glisten with their native colours and—more especially such as are translucent, with some portion of “their original brightness.” Happy for the public had it been, my friend, if the long-wished-for shower of words from your pen, had in like manner, washed off from them the metaphorical dirt and rubbish which have hitherto obscured all monuments of this description: but, since you have consigned this first cleansing to my best endeavours; and since it is the glow-worm light which streams from these “stones of fire” upon the early scriptural writings, which so considerably enhances their value with all lovers of truth;

I must here beg leave to recal, for a moment, the more critical attention of my readers, to that passage of the second Commandment to which I have slightly adverted in my last: namely, that which expressly prohibited among the children of Israel, the existence of graven images as objects of adoration.

We are to recollect, that when this remarkable prohibition was uttered—when each of the descendants of Abraham was expressly restricted from making unto himself any graven image—they were in the very process of becoming a distinct people; that the Decalogue was the divine mandate and means which was to effect this entire and lasting separation from all other nations; and that previous to this, the Hebrews may be presumed, like their Assyrian ancestors, each to have possessed his signet.—The every-day manner in which the signet of Judah is introduced in Genesis, so entirely accords with the mention by Herodotus that *every* Assyrian possessed a signet and walking-staff, that it would be over scrupulous not to believe that the Abrahamic family were, with regard to this customary article of personal property—this usual pledge to the honourable fulfilment of a contract—like those of their Sabæan neighbours with whom they were in constant intercourse. Judah travelled thus with his staff and signet to a sheep-shearing, where such pastoral business as the exchange of fleeces, or sheep, for other species of property, was not unlikely to be transacted, and his signet might for this purpose be wanted: or it might be wanted to consecrate a customary sacrifice. But from the time of the promulgation of the Commandments, the Jews were thenceforth and for ever, to separate themselves from those, who, by mistaking concomitancy for causation, had fallen into the fatal error,—in which superstitious habits, and the long established custom of their ancestry, had but too strongly confirmed them—of worshipping, each his patron constellations, and of considering those constellations, with perhaps, “Remphan the star of Israel,” as the presiding governors of his conduct, and arbiters of his destiny.

From all observances of this nature, the Hebrews were now to be weaned and withheld: and hence the wise interdiction by the Decalogue of the ordinary means of temptation and vehicle of crime.

In the *Moreh Nevochim* of Maimonides,* we read that, among the laws of Moses, were several which God caused to be promulgated, in order to restrain the Israelites from their propensities to the more ancient Sabæan worship. If the learned Rabbi is here *guiding* the *perplexed* in the right direction; among those restrictive laws must doubtless have been, "Thou shalt not make *to thyself* (that is for each man to possess as his own peculiar property) any graven image: not the likeness of any thing in heaven above; or on the earth beneath; or in the waters under the earth."—The awful threat which could not fail to operate as a most powerful inducement follows—"Thou shalt not bow down to them, nor worship them, for I, the Lord thy God, am a jealous God, visiting the sins," &c.

The reason for mentioning in this prohibitory law, heaven, earth, and the waters, I conceive to have been—not that the host or mass of the Israelites knew, or were supposed to know, aught of the immortal inhabitants of heaven, but—because, long before this miraculous era, the Chephenes, or astronomical priesthood, in forming the celestial asterisms; had—chimerically, as it would appear to us at first sight; but not on second thought, at this vast distance of time and place,—combined fishes, with beasts, birds, and the human form: so as to constitute those Minotauric, and Dagon-like, Andro-sphinges; (to use a term of Herodotus,) and other monstrous combinations, which Berosus describes to have been represented within the recesses of the great Babylonian temple; and which we also find sculptured on some of those cylinders which are about to become the subjects of our critical inspection.

Presuming that preliminary matters are at length sufficiently clear, and that some degree of curiosity has been excited; and hoping that I shall have done something towards assisting the reader in the connexion of general historical considerations, with the particular facts which we

* Part I. Dean Prideaux observes on this passage, that among the opponents of the Rabbi have been those who argued that the Sabæans were an inconsiderable sect, and that consequently it was not likely that God should have ordained laws in opposition to their rites and ceremonies: but this the learned Rabbi confutes, maintaining—satisfactorily in the opinion of our profound countryman—that notwithstanding they were in his time reduced to an inconsiderable number, yet that the Sabæans of old consisted of nearly all the nations of the earth.

are approaching—I willingly turn for the present from these more abstruse matters, in practical furtherance of my explanatory purpose.

Of the four or five engraved figures, which appear to have once surrounded this cylinder, three only, and some slight vestiges, remain: and of these three, which are clothed in the Babylonish costume, but two are sufficiently legible to be the subject of comment. The most forward, and least imperfect, of these, is an uncouth bull-horned, or crescent-crowned, figure, habited in what I should conceive Mr. Thomas Hope, (an amateur who has successfully studied the dresses of the ancients) would call a plaited mantle or peplum, wrapped thrice round the wearer, and terminated by a fringe; which as that gentleman observes, has been represented by Æschylus, as a characteristic peculiarity of the peplum of the Asiatic nations, and which agrees also with the scriptural* fame of the robe of Babylon: beneath this, as far as can now be distinguished, is a Vest, which accords with the general description of Herodotus, of the Assyrian costume;† and if we except the head-dress, and the action of the right arm—this is the same figure which occurs in such numerous instances on those cylinders of Babylon, which I here presume, and shall finally shew, to be of subsequent date to the present, and which I believe to be—I shall not say the Mylitta of Herodotus and Assyria, but—the Æstarte of Phœnicia; the Juno-Venus, subsequently—as well as the Diana, and Hecate, of Grecia; and the Asteroth, and Baaltis—perhaps also the Merodach of holy writ. In fine, a personification of the moon.

From the dissimilar accounts which the ancient mythologists have left us, of this great Sabæan deity, we are compelled to the inferences that, some of those who wrote did not know how she was sculptured; and that at different times and places she was variously represented; as human knowledge and local sentiment differed, and as art and refinement learned to superinduce novelty and elegance, on rude nature and simplicity.

From having been thus variously represented, and as variously named,

* See the story of Achar (in Joshua, chap. vii.) who was tempted to secrete a goodly Babylonish mantle. † “They have two vests, one of linen which falls to the feet; another over this which is made of wool.”—*Beloe’s Herodotus, Clio, cxcv.*

the primitive goddess—the Asteroth (or *Ashteroth*) of the sacred scriptures,—has become so disguised, so modernised, and be-Greek'd into Junos, Hecates, Venuses, &c. that we literally don't know her when we see her.—Calmet describes her as sometimes dressed in a long, and at others in a short, habit; in her temple at Libanus her head was veiled; according to Cicero she was exhibited in Phœnicia with a quiver of arrows; sometimes she appeared in a chariot: on the coins of Tyre, she stands erect on the deck of a ship; and on those of Carthage she is seated on a lion and wields a thunderbolt.

Of coins in general, I *might* say—in passing—as Mr. Jacob Bryant was accustomed to say of the society of antiquaries—“They're not *old* enough for me;” for presumptively all the cylindrical gems that I shall have the honour of setting before the reader's notice, were engraven before the art of die-sinking was invented. At Babylon, notwithstanding its great opulence and splendour, no money is believed to have been coined before the Macedonian conquest, any more than in Egypt; at least none of prior date has ever been found, and as, I believe, the downfall of the Assyrian monarchy preceded or accompanied the appearance of the Persian Darics, we run small hazard in concluding that none ever will be found. Nevertheless, it would be wrong to reject such aid as ancient coins may supply, toward identifying our Assyrian and Phœnician goddess.

It is well known, that on the earlier Greek coins, deities sometimes made their appearance; and if (as I incline to think) these deities were of Assyrian derivation, those earlier personifications of the moon, which appear on the coins of Greece, may possibly reflect back on ruined Babylon, some faint ray of the light that was originally emitted from her meridian splendour.

A figure of *Æstarte* or Juno, apparently derived from that ancient general representation of this deity, which will recur more frequently than any other figure, in the subsequent part of this work, may be seen in Spanheim. It is a front view of the goddess, habited in much the same manner as that in which she so frequently appears on the engraved cylinders, and standing on a crescent. On her head is a conical mitre, sur-

mounted by a much smaller crescent; her vestment, as on the cylinders, covers her figure from head to foot; but there are on the coin, no convolutions, or wrappings round, as in the case of the Babylonian figure.— Though the dress has apparently the same parts with the former, there is some local difference; the style of it, is that of another country. She here throws on either side, a peplum, as it were to reveal, or shew herself: which peplum appears to be suspended from the horns of the crescent above. As it is a direct front view, the analogical allusion is probably to the full moon emerging from the clouds, and the crescents are merely symbols.

In a future Essay, I shall request attention to the engraved figures of this great Sabæan deity which abound on the cylindrical gems, as compared with the descriptions of those statues of the goddess which once existed at Babylon, and in her temple at Hierapolis in Syria.

As the moon is ever in motion, and ever changing, we are not to wonder that the most remarkable of her changes, should become objects of especial regard and notation, to an astronomical people. It has been already intimated that one of those changes, or phases as they are technically styled, and one of her nightly varying stations in her own peculiar zodiac, are probably intended to be hieroglyphically shewn on the black jasper cylinder which is the present subject of our investigation.

Not much more than a geographical degree to the eastward of the lake of Genesareth, and near the foot of the Antilibanian chain of mountains, there existed in the time of the patriarch Abraham,—and how much earlier can only be conjectured,—a place called Asteroth *Karnaim*, that is, Asteroth *the horned*, where, according to Genesis, xiv., the Rephaim were overpowered by Chedorlaomer and his associates.

Parkhurst conjectures that the *Rephaim* had obtained their name “from being the restorers of the antediluvian idolatry of the moon;” and that hence their principality was termed Asteroth the horned. He also thinks it probable that the idol עשתרת was in the form of a woman with the head and horns of a bull, and quotes Sanchoniathon to shew that, according to the Phœnician mythology, Æstarte put upon her own head, the head of the bull as an ensign of royalty; he moreover quotes Or-

pheus in confirmation, who in his hymn to the Moon, styles her "Bull-horned."* The learned lexicographer has not stopped to consider *why* the head of a bull should be regarded as an emblem of royalty; nor to reflect that bull-*horned* is not bull-*headed*: yet surely there exists a distinction not very recondite, between these accounts of Sanchoniathon and Orpheus.

Now bull-horned figures—sometimes simply of the human form, and at others Minotauric chimeræ with human heads—are not unfrequent on these antique cylinders, but they are more frequently bearded than otherwise, and cannot therefore, in these instances, be intended for Asteroth Karnaim; unless we should take the latitude which those would willingly allow, who state that "she sometimes was styled a goddess, and sometimes a god, by the Assyrians, on account of the ambiguity of gender in the oriental *languages*."—I cannot however avail myself of this, or suppose that the asserted ambiguity, could so far operate in their *sculpture* as to occasion them, without good reason, to omit beards in some instances and affix them in others, to the chins of their human figures. I believe that sex had a great deal to do with the Sabæan modes and objects of worship, as well as with the system of principles on which they were founded.

Of what Mr. Jacob Bryant has written upon the subject of the Minotauri, I am well aware. I have read, without conviction, that this chimera came originally to Assyria and to Crete, from Egypt:† I have read moreover—but entirely disbelieve—that "an heifer was the *appointed* emblem of the ark of Noah,"‡ and that "that patriarch was represented under the semblance of a bull, or with the head of that animal."§ Mr. Bryant is a potent wizard, no doubt, and

"Can make a lady seem a knight:
And white seem black, and black seem white:
So much has he of *Glamour* might."

* At Elis was a statue of the moon, which according to Pausanias, book vi. chap. 24, was *horned*; his learned translator and annotator, Mr. T. Taylor, says, that her horns "were doubtless those of a bull."—*Vide* vol. iii. of his Pausanias, p. 329.

† As is stated in p. 302. vol.

iii. of Bryant's "Analysis of Ancient Mythology," 8vo. edit.

‡ p. 296.

§ p. 312.

Yet I can no more believe these things of the Minotauri of antiquity, than I can believe those other assertions of this learned gentleman, that Semiramis never existed: that the Egyptian pyramids were fire temples; that the tale of Troy was entirely the *invention* of Homer; and that the ten years war, which the ancient poets have celebrated as having been waged between the gods and the giants, was terminated by the patriarch Abraham, assisted by his pastoral allies and his servants; and which in fact Mr. Bryant would have us believe was finally accomplished very shortly after the fight at Asteroth Karnaim; of which it was the result: the Rephaim being "no other" (according to him) "than the Titans, rendered by the Seventy, the giant brood in Asteroth."

No. I rather incline to think that all the Sabæan monuments, wherein the bull appears, or appears mingled with the human form, have some reference or other to the asterism Taurus.

In truth, on the questions respecting Asteroth Karnaim, and the bull with crescent horns; a little astronomy is of more value than all Mr. Bryant's literary labour. That gentleman, however profoundly learned on some other points, and however venerable on that account—is here, verbally learned on a subject where words do not avail, or avail but little; and hence, he inverts the well known fable of the astronomer who fell into a pit, for he is digging downward for "roots," when he ought to be looking upward at the stars.

According to Sir William Jones; the Rev. Mr. Maurice; and Mr. Costard, the lunar zodiac, or series of nocturnal mansions of the moon, formed part of a very ancient system of Arabian astronomy. As, in the solar zodiac, the sun was observed from month to month to pass from one house or sign, to another; so the moon also was said to change her mansion every night, and to pass the fourth night of her age with the Hyades, forming those lunette and hieroglyphical horns a little above that cluster of stars, and on the forehead of the bull, which not unfrequently appear among the sculptured monuments of Egypt and Greece, as well as those of Assyria.—Thus say the astronomical records which have been derived from Arabia, as they have usually been construed; but I shall proceed to shew, that originally this must have taken place

immediately after the vernal conjunction of the Moon with Sol in Taurus, at the very commencement of the year:—and then only, to speak with astronomical precision.

The phenomenon here spoken of, has been celebrated by some of the classic writers; and hence has been regarded by those who were unobservant of the stars, as if it were real, regular, and of monthly recurrence: but these monthly and nocturnal residences, or transits, of the moon, excepting at the seasons of recommencement of the Metonic cycle, could have been only nominal; and must have compelled those who used or tolerated them, to frequent intercalations. It is now generally known, that between eighteen and nineteen years must elapse before the moon returns to the same places on the same nights of her age. And indeed—whatever sacrifices of truth, ancient astronomy may occasionally have made, to opinions which had incorporated themselves with the popular superstitions—my own belief is, that the esoteric astronomy of the Chaldeans was also far better informed, in what respected the path or orbit of the moon, than this Arabian zodiac would seem to imply.

That the Chaldeans were acquainted with the Metonic cycle, I do not here venture positively to affirm or deny: Mr. Frend, to whom the public have for these sixteen years past been indebted for a detailed nightly account of the celestial* phenomena, and who is well qualified to form an opinion on the subject, thinks they were; and Costard, in his “Rise of Astronomy,” &c., appears to understand that cycle as being no other than the Chaldean *Saros*. But it is difficult, though very possible, to suppose the lunar zodiac to be much older than three thousand years.—From its beginning with the stars in the horns of the Ram, it would seem to be fairly inferable that, this zodiac was formed at some time in the course of the one and twenty centuries during which Aries was the first of the zodiacal signs; I own however that—being inclined to believe with Dr. John Hill, that this Arabian zodiac is meant by the word “Mazzaroth” in the book of Job; and being also, as before stated, of the number of those who believe that poem to be of very remote anti-

* “Evening Amusements, or the beauty of the Heavens displayed.”

quity—these horns, are the horns of a dilemma to me, from which I must hope for relief from your Arabian scholarship.

The Doctor's idea is, that Jehovah alone possessed the power to "bring forth *Mazzaroth** *in its season*:" that is to say, so to regulate, or carry round, the moon, or her mansions, that,—the mysterious cycle being completed,—the pristine order of procession shall be renewed, and the first month of the year commence with the moon on the head of Aries. And, it is remarkable, that this first mansion of the moon was called *Al-sheratán* by these Arabian astronomers, which is emphatically *the sign*!—Perhaps you will recollect that I have among your smaller Babylonian signets, two with flat faces, of which this first mansion of the moon forms the device: one being simply the ram's horns surmounted by the crescent moon; and the *other*, the head and horns of Aries, springing from that known emblem of vernal humidity, the expanding bud of the lotus, with the bright star *Arietis* in the field of the garnet. Both appear to have been signets of Babylonian citizens of inferior condition, who were *natives* (as the astrologic phrase is) of the sign Aries: one born, as I am led to suppose, while the star *Arietis* was rising heliacally,—the other, on the first night of the new moon—or perhaps the second, or third, (or while she was yet a crescent) for strictly speaking, on the night of her conjunction with the sun, she is not visible. Further, if *Mazzaroth* was in its season, the first moon of the year—called *Neo-menia* by the Greeks,

* Having proceeded thus far in printing the present volume, I have to acknowledge the receipt, through Mr. Valpy, of the learned "Memoir" of Sir William Drummond on the zodiacs of Esné and Dendera; and the great pleasure and profit I derive from reading it.—But I observe in p. 74, that this philosophical scholar, understands the *Mazzaroth* of Job to be the *solar* zodiac, and paraphrases the passage in question, as follows: "*Canst thou bring forth the zodiacal signs, each according to the season in which it ought to appear?*"—With due submission, it appears to me that the meaning which Dr. Hill has ascribed to this text, is more pertinent; since, to restore what is sometimes deranged, or apparently out of season, in the celestial phenomena, implies, to mortal minds, a more godlike manifestation of power; and fills up the required meaning better, than bringing forth the signs of the solar zodiac, each according to the season in which it constantly does make its appearance.—But Sir William's argument against Visconti is not a whit the less conclusive on this account, because the lunar zodiac implies the existence of the same constellations as the solar.

and celebrated by them, as well as universally by the star-worshipping nations, as an important festival—would also be indicated; the vernal equinox being in Aries at the time.

The only way in which I can in any degree reconcile Sir William Jones's idea of the remote era of the formation of the lunar zodiac, with the fact of its beginning with the first stars of Aries, and without detracting from the high antiquity of the book of Job, is by recollecting another fact, which perhaps the reader will deem of a less controvertible nature: namely, that the large and bright star in the head of Taurus, was by these same Arabians called *AL-DEBARÂN*: that is, the *foremost*, or *leading*, star: which, as it could only have been thus named, when it did actually precede all others, records, with its own etymology, a very important and luminous truth; from which I would argue, that after the sun had made his vernal transit from Taurus into Aries, the lunar zodiac was altered at the same time with the popular calendar; and that only this later order of the mansions has descended to us.

Be these matters as they may, I conceive that *Asteroth Karnaim* belongs to that earlier period when the year opened with Sol in Taurus; and that all the ancient sculptures to which I have adverted, particularly these of Assyria, and those of Egypt, wherein the bull appears with lunette, or crescent horns, and with the disc of the sun placed between those horns (of which there are several of bronze and sculptured stone in the British and other museums) are direct allusions to the important festival of the first new moon of the year—if not during those one and twenty centuries which preceded the sun's passage into Aries at the season of the vernal equinox, at least till the colure had advanced, or retrograded, (for I hardly know which to term a portion of circular movement,) to the Pleiades, which in their turn became leading stars of the vernal season.

The number of bronze bulls with lunette horns, which have been dug up at Babylon, leave little room to doubt that a festival, and other sacred rites, of *Asteroth Karnaim*, were there observed, as well as in Egypt, and Canaan:—either (as afterward among the Jews) a monthly feast in honour of the new moon; or an annual celebration of the festival of the first new moon, when the year opened with Sol and Luna in Taurus.

All the nations of the East appear to have hailed with suitable rejoicings, the appearance of the first new moon of the year : and the new years' festivals of Babylon and Judea, had in all probability a common origin with those of Egypt, Persia, and Greece ; for though there were religious wars at this early period, yet, as in later times, the points of contest were those of subordinate importance.

The Persian Nourouze has been often described ; and we know that the annual return of this season was celebrated by the Hebrews with the sound of trumpets : whence in the Psalm which was—and I believe still is,—annually recited at the Jewish feast of trumpets, on their new year's day, David sings, " Blow the trumpet in the *new moon* : in the *time appointed* : on our solemn feast-day : for this is a statute unto Israel, and a law of the God of Jacob. This he *ordained* in *Joseph* for a *testimony* when he came out of the land of Egypt."

Here the royal Psalmist *appears* to advert to the *origin* of the festival, for the sacred ordinances of the Jews might not be permitted to reach higher than their exodus :—but it is not a little remarkable that he should mention Joseph, and *not Moses* in this place :—However, with him the more ancient rites of Asteroth Karnaim were out of the question.

It is well known that a conjunction between the two great luminaries takes place every month ; and so scrupulously observant of the moon, were the Hebrews in their celebration of this monthly feast, that Godwin says, " When the conjunction was over-past before noontide, then the new moon was celebrated the same day ; but if it continued but one minute after noon, then the feast was translated to the day following, because otherwise they should begin their holy-day in the time of the old moon."*

Of the bronze bulls of Babylon which I have mentioned above, you may remember presenting one to Sir William Ouseley ; and that another, exactly like it, remains in my possession. They have lunette horns ; and what is equally remarkable, they have the buffalo hump of the cattle of the Ganges, which seems to corroborate Mr. Payne Knight's hypothesis of the original Taurus being the Urus or wild bull of northern Asia.

* " Civil and Ecclesiastical Rites, &c." p. 123.

Of this bull a representation, somewhat reduced in size from the original—will be found a little further on in this volume: and with it, I have exhibited an astronomical bull of bronze, which was imported from China, and one of stone, with the disc of the sun and the crescent moon above his head, which was brought from Palestine by Sir William Rouse Baughton. These I have thrown together, in order to afford a comparative view of the antique *Tauri* of three great, and very ancient, Sabæan nations.

A religious reverence for the zodiacal bull, appears, from a very early period, to have been pretty general—perhaps it was universal,—throughout Asia, from that chain or region of Caucasus to which it gave name, and which is still known under the appellation of Mount Taurus, to the southern extremities of the Indian peninsula; extending itself also into Europe, and through the Eastern parts of Africa. It evidently originated during those remote ages of the world, when the colure of the vernal equinox passed across the stars in the head of the sign Taurus—a period when, as the most ancient monuments of all the oriental nations attest, the genial light of arts and letters, first shone forth.

And this reverence for Taurus, appears to have continued among the uninitiated multitude, long after the lapse of those one and twenty centuries, during which the equinoctial colure remained in that constellation, and when it had passed into that of the Ram. That the vulgar do not easily abandon any sacred custom over which two thousand years have rolled their venerable sanction, is no new discovery—or at least, it is none of mine:—Even so lately as the age of Augustus, Virgil (I suppose in conformity with popular belief) wrote

“Candidus auratis aperit cum cornibus annum
TAURUS.”—

And when we recollect how very customary it is even at present, to begin our enumeration of the zodiacal asterisms with Aries—as if Aries were still the first of the signs—notwithstanding that the vernal colure has retrograded to the farthest degrees of Pisces, we must cease to feel surprise at the continuance to a time far beyond its astronomical period, of the ancient veneration for the constellated bull.

Mr. Payne Knight, supporting his allegations as usual on sound classical authorities, says—"The Chinese have still a temple called the palace of the horned bull; and the same symbol is worshipped in Japan, and all over Hindostan. In the extremity of the west it was also once treated with equal honour; the Cimbrians having carried a brazen bull with them as the image of their god, when they over-ran Spain and Gaul; and the name of the god Thor, the Jupiter of the ancient Scandinavians, signifying in their language a bull, as it does likewise in the Chaldee."—

—"In many Greek, and in some Egyptian, monuments, the bull is represented in an attitude of attack, as if striking at something with his horns; and at Meaco in Japan, the creation of the world, or organization of matter, is represented by the Deity under the image or symbol of a bull breaking the shell of an egg with his horns, and animating the contents of it with his breath*."—

As this Japanese bull might prove rather a dangerous animal, I should not choose to attempt to take him by the horns; and not presuming to quarrel with the construction put upon this sculpture (for such I suppose it is) by the author of the "Memorable embassy to the Emperor of Japan"—that is, by an author I do not know, upon a monument which I *have not* seen, I willingly leave it to you, my friend, who in all probability *have* seen it, in the course of your oriental travels.—In other instances I suspect that the Orphic, or Mundane egg (as it has been often termed) is meant by that "something," which in the Greek and Egyptian monuments is only mysteriously indicated; and that this *egg* is nothing more nor less than the symbolical and annually recurring orb of the new, or prospective year, at the vernal season: white in its purity; teeming with vitality; yet veiled with that uncertainty which is the parent of the most pleasing hopes. The whole is in beautiful analogy with the natural phenomena of the vernal season. Taurus, reanimated by the returning energy of annual productive causation, of which it necessarily became the accredited sign—by opening the year, burst the symbolical shell.

In all probability, it was in its origin, to the same mystic purport, that

* Inquiry into the Symbolical Language of ancient Art and Mythology, pp. 22, 23.—This latter fact is taken from the printed account of a Japanese embassy.

there still remains in the island of Cyprus, an antique vase of an egg-like form, and of the extraordinary dimensions of thirty feet in circumference! on which the bull of the zodiac is sculptured in good style.

I exhibit a representation of this vase; than which I know not where to look for a larger. Its girth exceeds by about four feet that of the vase which was presented by his holiness the Pope to his present Majesty;—on which the Academician Westmacott is at this time employing his masterly chisel; and which has been called the largest in the world.

The reader will observe, that the Bull of our Cyprian vase is sculptured in high relief, and is tastefully placed in a semicircular niche, which is hollowed out and over-arched for its reception, in that part of the vase, where in smaller vessels of the same kind, would be placed the ear or handle. Whether on the side opposite to the Bull, the sign Scorpio is sculptured and inserted in a similar manner, it is now unhappily, too late to learn either from the artist who made the drawing of this antique, or his patron, Sir Robert Ainslie, for both are fallen into the grave. Any future traveller who may visit Lemisso, would do well to notice this circumstance, and also whether there be any remains—(as I suspect there is) of Leo and Aquarius on those other two sides of the vase which are in quadrature with Taurus.

My reasons for this suspicion, are, that *four* ears or handles are quite unusual on antique vases of any dimensions; and that here are four; wherefore, though it should be argued that the present vase is colossal, yet it is too large to be removable even by means of four handles: and the astronomical reader need not be told, that for the period during which the vernal colure passed through Taurus, that of the autumnal equinox, cut in like manner, across the constellation Scorpio; whilst Leo and Aquarius were the places of the corresponding solstices.

The modern Lemisso (sometimes written Limassol) stands on the south side of the isle of Cyprus, and on the site of the Amathus of remote antiquity: and in a lonely spot in its neighbourhood, where it probably still remains, was found this wondrous egg. (Mr. Meyer remarked that the stone of which it is formed, was hard,—probably indurated by time and the heat of the sun, for on some minerals, the joint operation of these,

will produce this effect—but that within it was softer, and when rubbed had the odour of petroleum.)

A temple of Venus is known to have stood hereabout, it having been the chief ornament of the ancient city of Amathus, and celebrated for the rites which were there solemnized in honour of Venus and Adonis. Of this temple, it may be feared that the ravages which the island sustained during the crusading ages, as well as subsequently under the dominion of the Turks, have demolished or removed the walls and columns; but as Adonis was of Phœnician—though more remotely (as I trust will be shewn in a subsequent part of this work) of Æthiopian and astronomical—origin; and as the Greeks obtained their knowledge of the goddess Venus herself, from this her highly favoured island of *Kupris*, it appears to be far within the pale of possibility, that the sculptured egg, or vase, of which a representation is before us, may have remained from those ancient times; and may have been used in the celebration of those Cyprian mysteries with which fable has delighted to busy herself. Having been built, (as Herodotus informs us this temple was,) by Phœnicians, and after the model of that at Ascalon, which of all the sacred edifices erected to Venus, was the most ancient;* the Taurine rites, to which our sculptured Amathusian bull may have belonged, may have been introduced into Cyprus together with the worship of this goddess. According to the classical legends, Venus once changed her Amathusians into bulls; and upon some other occasion, horns sprouted from their foreheads: both of which are mystic allusions of which the occult meaning may not yet be irrecoverably gone—(some reference they may perhaps have had to Asteroth Karnaim) but of which I shall not at present essay the explanation. Taurus has ever been esteemed the favourite mansion of the planet Venus.

In a future page, where the subject will more pertinently introduce itself, I mean to resume the consideration of that mystic re-invigorating principle of annual fecundity, which was among the Sabæans religiously connected with the heliacal or cosmical rising of the Tauric “*stars of abundance*,”—so termed by all the Oriental nations of antiquity; and the learned will permit me to say, that, notwithstanding all that has been

* I copy these facts from Vol. I. Clio CV.

written on the subject, it yet remains for scholars to identify, or discriminate between, the Grecian Venus, and the Mylitta of Assyria and Herodotus.

In abatement of the full amount of whatever value may be attached to these remarks, it must be acknowledged that the sculpture of this Cyprian bull, is in a taste and style somewhat superior to the generality of such Phœnician art as *we have yet seen*, and which seems rather to point toward the more refined art of Greece: nor has the bull, the hump of the Asiatic Taurus.

Neither am I without some sceptical misgivings (the mention of which may assist the general reader in forming an opinion for himself) in referring the mystic meaning of this Orphic or mundane egg, to a season of annual recurrence. Those who have mythologised differently, may with great plausibility—and perhaps with truth—certainly with the poets on their side—argue, that as here stood the ancient temple* of the goddess of *Love*; the mundane egg may emblematically—or rather cosmogonically—connect itself with the more ancient rites, as representing that chaotic egg, on which primordial love—“Dove-like sat brooding.”—In which case the Japanese bull, which is mentioned above, will bear to be regarded as a more remote, and less elegant and expressive, symbol to the same purport.

I own however, that, on the whole—seeing we have the evidence of Homer that, before the Trojan war the fine arts of Phœnicia had reached much farther than modern criticism would else have been disposed to allow the Sidonians credit for; and recollecting that the city and temple of Amathus, were of Phœnician foundation, erected in all probability by a colony from that previously existing Amath† which stood not far east-

* I believe the literal meaning of *Ama-thus* is *Love-incense*: for *Thus* is *incense*; but if we could be sure of this, it might still be hard to say whether this temple of Venus existed before *Ama* was the synonym of Love? This meaning may have been derived from the temple.

† The *Hamath* of the early scriptures. Resembling sounds derived from un-orthographical ages, are glittering but often delusive: yet opinion should always be free; and it is the duty of a public writer to assist in forming it on the most extended premises. *Ham-ath* may be an astronomical appellation, taken from the name of the Sabæan son of Noah, combined with the primitive אמת.

ward of the source of the Jordan, nor very far from Sidon (the prime seat of Phœnician art); bearing in mind too, the presence on this monument of the sculptured bull, and its transcendental importance as an ancient Sabæan sign—I incline to the belief formerly expressed, that it belongs to the later part of that remote and important period of Taurine splendour, “When with his horns the Bull unbarr’d the year.”

Returning to the details of our Babylonian cylinder: it will be observed that the bull-horned figure which I have supposed may be intended for Asteroth-Karnaim—and if not for Asteroth-Karnaim, certainly for that bull-horned Asteroth of whom other examples will occur in the course of these researches, always hieroglyphically expressing the first new moon of the year while Taurus remained the first of the zodiacal signs.—It will be observed, I repeat, that she is evidently leading onward another figure which holds a quadruped. The fore legs of this quadruped are obliterated by time and accident, and the animal has small remains of distinctive marking; but from the general proportion which it bears to the human figures, and from the little that does remain, I understand it to be intended—perhaps for a ram, (or lamb,) which from the first has apparently been so uncouthly expressed as to require the faith of an hierophant to apprehend its meaning.

This figure is—or rather was—followed by two others, the forwardest of them apparently bearing a basket; but these figures are become too illegible to be the subject of comment. One sees only that they have been habited in the embroidered and fringed costume of Babylon.

The bearded figure which holds the quadruped, I conceive, *may* be intended for Baâl, Beel, or Bel (the personified sun), the chief deity of Babylonia, (of whom I shall have much future occasion to treat,) in possession of Aries.—In short, the Baal-ammon of Solomon’s song. The Baal-ammon of Solomon’s song, I may be told, was a *place* so named: but, granting this, it was clearly so named in honour of the great Sabæan deity. If it be not the very city now called Baal-bee, it must have been situated near it, and could not have been very far from the place called after Asteroth-Karnaim. I should suppose that the name Baal-ammon, must have been conferred on this place, at the remote era, when, at the

season of the vernal equinox (the commencement of the Chaldean year) the sun was no longer found to be in the sign Taurus, but had begun to enter that of Aries;—when it had even begun to be publicly acknowledged to have made this important transit,—and the Ram became in its turn the leader of the celestial signs; which by the help of a few numerals, would give the probable date of the naming of the district of Baal-ammon; a part of Canaan, which I have elsewhere presumed to be the site of the city built by King Solomon, and called by him Baal-ath.

There is allowed to be mystery in Solomon's song. It is therefore possible, and even not unlikely, that the poet's allusion may not be to the place called Baâl-ammon, or Baâl-ath; but that the lovely shepherdess or vine-keeper who stood so high in the royal favour, might have been a *native* of Baal-ammon in the astrological* sense of those words; that is to say, born while the sun was in Aries, and courted while Solomon was an apostate.—But I find myself wandering,—if not from the text,—from one of my own purposes, which is, to pass over the differences of construction that may here arise between those who contend that this “Song of songs,” was a love-song, and those who profess to believe that it is a Church-song.

If, as is supposed above, the sun had recently entered the sign Aries at the time specified in this gem; which appears not improbable, and which would confer on the engraving an antiquity of about four thousand years; the device may have had reference to that Babylonian festival (of *Neomenia*, to call it by a Greek word) which was celebrated at the first crescent, or new, moon, of every new year, during a period when Mazzaroth not being exactly in its season (though not far from it) there existed a slight discrepancy between solar and lunar time: Baâl and the equinox having moved into Aries, while Asteroth at the commencement of the year was found to be in Taurus.—I assume that the stations of the sun and

* It has not however, been astrologically construed by Mr. Harmer. “She possessed, (says that gentleman) for her marriage portion, a noble and fruitful estate in Baal-ammon”—which he supposes to have been “situated in the delightful valley of Boscat, in the immediate vicinity of Bal-bec, leased out to a variety of tenants, whose number we are not acquainted with, but every one of whom paid her a clear rental of a thousand shekels of silver.” My readers may now determine, each for himself, between the matter of poetry, and the matter of fact.

moon were here obliged to be specified; but, as David sings, “the *moon* was the sign of feasts;” and while the calendar was disarranged—that is to say, when the sun and moon were not concordant at the vernal season,—lunar time appears to have over-ruled and governed the solar—at least in the exoteric astronomy of the Chaldeans—probably because the fixed stars which served to mark the stations of the planets, were visible *to the multitude* at night, who could not with the same ease and certainty know the sun’s place by day.

These suppositions, and these facts, (my dear Sir) will be found to correspond both with that Jewish feast of trumpets which has been already alluded to, and with our own Easter. I believe that our festival of Easter, is by Bochart and Gale, and also by Parkhurst, asserted to be of Phœnician origin: I believe that it was originally the feast of *Æstarte*, *Æsterth*, or *Asteroth*, as the name is variously written. I know of no word that appears so likely as this, to be the etymon of Easter. In truth it is the very word, with the omission of its termination,—the diphthong *Æ* having been turned about by the Saxons during the dark ages—perhaps from the difficulty of writing it otherwise. It is also the same sacred festival; the new, having been changed to the full, moon, in the course of the process of converting it to Christianity. On the other hand—If the device have no such reference to an ancient Babylonian festival; but (agreeably to my former hypothesis) relates to the nativity of the individual who first used it as his signet, he must have come into the world at the very commencement of the Chaldean year; somewhere about four thousand years ago: and a modern astrologer would explain the device shortly, by saying that, when the native was born, Sol was just entering the sign Aries, whilst Luna was crossing the forehead of Taurus.

I speak of this engraving—which is in part obliterated, and what remains of which is both fractured and worn—with considerable uncertainty. From seeing the etching which accompanies what I write;—or, if the reader pleases, from seeing an impression of the original cylinder—he may be enabled to determine for himself. Perhaps as we proceed in this astronomical inquiry, our light may increase; and distinct stars may emerge, where at present are only *nebulæ*.



ESSAY V. TO RICHARD PAYNE KNIGHT, ESQ. V.P.S.A. &c. &c. &c.

SIR,—The known value of your opinion on subjects connected with ancient art and mythology; combined with your candour, and your caution in admitting novel and ill-principled interpretations, have induced me to address the present essay to you. Your knowledge of ancient languages too, (not to mention your astronomical science,) by soaring where I sink, may, as I flatter myself, come in aid of that mutual conviction, and that public information, which are my eventual purposes. If the engraved gems of ancient Babylon should enable me to throw new light on any of those problems which have for ages divided the learned, such a result cannot fail to prove highly interesting to Mr. Payne Knight.

On the important but embarrassing questions of, which is the oldest nation of the world? and, what people were the inventors of astronomy? and astrology? (which doubtless were anciently regarded but as one and the same science) we cannot reasonably expect much more information from classical literature than we have already attained—unless haply, we should meet with ancient MSS. which have hitherto eluded research: we

should therefore with the more zeal, seek for it among such sculptured or engraved monuments of remote antiquity, as have escaped the destructive ravages of time and war.

The banks of the Tigris and Euphrates cannot in this respect vie in imposing character, with those of the Nile. As Assyria is not a country of stone, no monuments of the same gigantic and durable kind with the wonders of Egypt, can be expected to remain at Babylon, Nineveh, or the sites of Resen, Calah, or Ur. But smaller antique monuments may possibly be the depositaries of truths not less important: we trace more of grandeur and beauty in the engraved gems of Greece, than in the colossi of Egypt; nor perhaps can any thing now be conceived more likely to contain the information of which we are in quest, than such engraved Sabæan or Chaldean signets as are the proper subjects of the present essays. To the sacred care of the art of engraving on imperishable substances, it has ever fallen to cherish and reproduce the creations of genius. The talismanic casket, where antique taste, knowledge, beauty, and grandeur have reposed, has been in her vestal keeping. It is she who from age to age has preserved alive those embers of Promethean fire—stolen at first from heaven—which rekindle the light of mind, and convey its radiant blessings through dark and barbarous periods.

Of the architectural attainments of the aborigines of this part of Asia, our knowledge is but general and vague; amounting to little more than that their edifices were of brick, of square forms, and of vast dimensions: but the present engravings throw some light on those powers of imitative art, which have been alluded to by Ezekiel, and eulogized by Herodotus and Diodorus; as well as on that astronomical science which will here come under our more especial review: and it may not be unworthy of passing notice, nor of being remembered by the philosophical inquirer, that, as far as the national *style* of Assyrian art may be judged of by the best of these cylinders (of which the present is one) it bears a much nearer resemblance to early Grecian art, both in its general arrangement and its freedom of outline, than exists between the latter, and the stiff, trammelled, and conventional, art of Egypt. Homer points to Phœnicia as having produced those personal ornaments belonging to the Greeks

of the heroic ages, whereon fine art had been employed; and when the present Babylonian engraving is exhibited, it may easily be believed that this great metropolis was the common center of Phœnician, and of Assyrian, art. In the collocation of parts which it displays, there is, I presume to think, to an eye accustomed to make comparisons in tracing the *progress* of style, an evident,—though not very near,—resemblance to that of those sculptured marbles from the temple of Apollo, which are now in our national collection. So much resemblance however, as at least to render it not improbable that we may here behold the oriental rising of that sun of art, which afterwards gilded the Parthenon and its own temple at Phigalia, with unfading glory.

In seeking for the seed-bed of astronomy, Lucian, as you will remember, goes further south than Babylon. He says that this science came originally from Æthiopia; but whether by that denomination, he means the oriental or the occidental Æthiopia?—Whether the nation of Cushites eastward, or that westward, of the Red Sea? is not specified: nor perhaps will it be thought material by those who believe that both these people were of the same lank-haired race.

That this was not a mere passing thought of Lucian's, whilst treating a subject where some have doubted the sincerity of his gravity, but was his settled opinion; may be shewn from his dramatic story of “the Runaway Slaves:” which also may incline us to suppose, that where he is describing the constant serenity of the Æthiopian climate and atmosphere, he means those of the Happy Arabia; which is by most geographical antiquaries thought to have been peopled before the banks of Upper Nile. In that story, he introduces Philosophy herself, declaring to Jupiter that from the Brachmans, she repaired straight to Æthiopia, from thence to the Egyptians, whose poets and prophets she instructed, and *then* betook herself to Babylon to instruct the Chaldeans.

This latter is perhaps an erroneous statement; but is not immediately in question. Mr. Tooke (the latest translator of Lucian) adds in this place, very pertinently to our present occasion, “The route which Lucian causes Philosophy to take, from the Brachmans to the Æthiopians, and from thence for the first time to the Egyptians, agrees per-

fectly with Herder's very probable hypothesis (which is also corroborated by Diodorus Siculus) that the *Egyptians were a people of Southern Asia, who travelled westward over the Red Sea, and from Æthiopia, by degrees spread themselves over Upper Egypt.*"*

But Count Volney has collected evidence which appears very credible, of alliances subsisting in the remoter depths of time, between the monarchs of Yemen or Arabia Felix, (the seats of the aboriginal Cushites)—and the most ancient of the Babylonian kings: which evidence conspires with the presence of Chepheus and Cushiopeia (whom I promise myself the honour of introducing to public notice), and with other proofs afforded by the celestial sphere and by our antique cylinders, in establishing this fact of the *Æthiopian* origin of astronomy—I shall not say incontrovertibly, but with a weight of evidence that will probably be thought preponderating: unless our enterprising young countrymen who are reported to have lately penetrated to Saba, should have any thing important to throw into the alternate scale.

In doing myself the honour, Sir, of addressing the present speculation to you, I ought not perhaps to dissemble, that the hopes of my pride have been stimulated by a circumstance to which I have not yet adverted. I am taught to reckon Sir Henry Englefield and yourself, among the most sceptical of my antiquarian friends (if I may here presume to use these words)—I mean the most sceptical in those branches of knowledge which are involved in the present inquiry: as my subject is unexplored, unexpected, and far out of the common track, I ought perhaps to anticipate that the conviction of most readers will be but slow; when, as I proceed, it shall gradually be perceived that the reasons I adduce, are at once concentric, and capable of indefinite accumulation, the result may be expected with more of the confidence of geometricians, than of the apprehensive anxieties which are attendant on the discoveries of taste.

* Tooke's Lucian, vol. i. Note to p. 606. In another note the translator adds that, "Lucian in this speech of Philosophy, presents the reader with a no less elegant, than accurately drawn, outline of her ancient history; which affords a fresh proof of his, not common erudition; and describes the progress of the arts that polish life and the refinement of the human race from one people to another, with historical veracity."

Yet a system of correlative parts, cannot by any human means, be brought into instantaneous existence. If I engage to construct an *arch*, time must be allowed for the arrangement of my materials; for the affixation of my key-stone; and for the application of that superincumbent weight which a scientific eye regards as being the surest test of firmness and durability.—I can say however with the astronomer in *Rasselas*, that “Not to be *easily* credited, will neither surprise nor offend me;” and I beg to add, that I am no stranger to the worth, or the consciousness, of that sentiment which on such a subject, prefers beyond all ratio, the belief that is founded in scepticism, to that which springs from credulity.

Has this latter feeling dictated the selection of the signet from an impression of which was copied the etching which stands at the head of the present address?—I confess that I think this particular cylinder bears on its face, at least as strong internal evidence of being an antique astronomical monument, as any other which is likely to appear in the present work, unless that belonging to Sir William Boughton should be excepted. Being for the most part (as I understand it) composed of constellations that have suffered little change or disguise in passing through the refrangible media of Greece and Rome, it may justly claim to be regarded as more entirely trust-worthy and convincing than its predecessor; and having fortunately escaped damage from chemical decomposition, as well as almost escaped accidental fracture from the blows of those Arabian pick-axes which have for ages been employed in removing the bricks of Babylon, and consequently in the disinterment of these curious antiques, its engraved contents still appear to shine with a clear radiance of primitive truth and simplicity, from amid the scintillations of clashing authorities; the clouds of doubt; and the artificial haloes of national vanity with which our friends the Greek poets and philosophers have surrounded all the *barbarian* asterisms.

In short, I think, that—excepting a certain pristine antique physiognomy, which in fact does but assist our conviction of their identity and their great age,—*Aquarius*, *Engonasis*, *Boötes*, and the *Bear*, as displayed on the present monument, are unequivocally the same which we so frequently see vulgarised on the spheres and stellar charts of modern

Europe. And they no less unequivocally prove that we have derived those constellations from the Chaldeans—and not from the Egyptians;—for among the astronomical antiquities of Egypt, I find nothing that can be put in competition with them in point of resemblance to the constellations of the modern sphere. Without at present presuming either to controvert, or corroborate, Lucian's opinion, which was also that of Voltaire and others, that Philosophy came originally from the Bramins of Hindostan, I question whether she proceeded down the Nile, in passing from Æthiopia to Babylon.

Concerning the inferences to be drawn throughout these antiquarian investigations, from the juxta-position of rude simplicity with complex refinement, in the styles of art that may fall under the view of the general reader, he must permit me, with our old friend Mat. Prior, to apprise him that he is not to “*look for Versailles*,” whilst I am shewing him “*Down Hall* ;”^{*} and that our present celestial sphere having in the course of its descent, passed through Greek, and Roman, if not through Egyptian, versions, we have no right to expect the asterisms of Chaldea, to bear any very striking resemblance to those on Senex's or Cary's globes.

Where, through obscure, and sometimes scanty, premises, we can perceive or infer, enough to establish in our better judgment, the identity of a constellation or star; we must accept the omen, and learn to be satisfied: better satisfied indeed we ought to be, if we see also that attendant air of *primitive* art of which I have attempted to suggest the idea, than if we beheld them “*trick'd and flounc'd*” with our present foppish refinement, sophisticated grace, and irrelevant appendages—Boötes for example, of whom I shall first proceed to treat, with his theatrical buskins, and his anomalous† club.

It has been well observed by a writer of more sincerity than art, that “the ancients allude so often, and sometimes so particularly, to the figures

* “I shew'd you Down Hall—Did you look for Versailles?”—*Song by Prior*.

† His collared and coupled hounds, which are also a modern addition by Hevelius, are not liable to the same objection; as we shall presently see that one of the characters in which Boötes anciently presented himself, was that of a Hunter.

on their globes in their poems; that there is no understanding the latter, without having some acquaintance with the former. This goes so far that Quintilian, where he is giving instructions how to form his young orator—after speaking of his reading the Poets, says it is necessary for him to study astronomy in order to understand them. This (continues the author of the *Polymetis*) is become still more necessary at present, for we have been used not only to be unassisted by the figures of the constellations as they were represented on the ancient globes; but to be misled too by the figures of them as they are represented on the modern. For though the constellations in general are pretty much the same in both; yet, either their characters, or dress, or air, or attributes, have been somehow or other changed in almost every instance, as will easily appear to any one who would take the trouble of comparing the figures on the Farnese globe, with those on any of the most received globes among the moderns. This has been so little regarded hitherto, that on asking some celebrated mathematicians of our own country, what were the principal differences between the figures of the constellations on the ancient and on the modern globes, their constant answer has been that they had always imagined that there was not any difference at all.”*

Yes, strange as it may seem, notwithstanding their intrinsic interest, and their importance to chronology and history, *sculptured astronomical* monuments, have neither been sought for, nor examined when accidentally found, with any thing like a sound tact of critical inspection; and the changes in almost every instance, that (as Mr. Spence regrets) have been so little regarded hitherto; are become to an antiquary, serious and weighty, but at the same time stimulating, considerations; as they tend to shew the utility and value of the science which he professes, and are fraught with important information.

But he has to labour with little help in tracing the descent of the modern asterisms of the sphere from those of remote antiquity. Since the resuscitation of the Babylonian signets, we seem to possess the two ends of an immense and magnificent chain, somewhat resembling that of Jupiter in

* Spence's *Polymetis*, p. 164, folio edit.

the Iliad : a chain fashioned from age to age by various art, and by means of which short sighted human science, had intended to connect systems of cycles and worlds with each other, if not time with eternity : but where are the intermediate links? If found at all, they must lie disconnected, broken, and buried among the ruins of ancient literature and sculpture. I had not only to dig for them ; but to learn where to dig ; and ah ! how much to distrust what the scholars had fancied themselves to have turned up from time to time. In short, the result of my widest and deepest research into this charmed ground, has been

——“ but to know how little could be known ;”

and, to see others faults :——Happy if the wisdom to feel my own could also have reached me.

But, Sir, you will not suppose, that in asserting the necessity—the propriety, at least—of antiquarian scrupulosity, I am putting in a claim for moral wisdom.

In either view, it may be thought that in adverting to this masterpiece of modern moral poetry, I might, with propriety, or without reproach, have gone one verse further back, and addressed you in the words of Pope's apostrophe to Bolingbroke ; but I would not be misinterpreted, or run the hazard of being thought capable even of misprision of flattery : and you will perceive that my subject rendered it incumbent on me to attempt something like a critical genealogical examination of the constellations—as far as the regretted scantiness of our documents would allow—before I could claim homage for my kings, and veneration for my patriarchs, of the original sphere.

Working “ my little bark ” upward on this exploratory voyage, against the stream of time, I soon arrived at Dr. Long's mention of the *Syntagma Arateorum* of Grotius. He says, “ The most ancient pictures we have of them (the constellations) are those published out of an ancient manuscript by Grotius : but these, (he justly observes,) though venerable for their antiquity, are by no means agreeable to the originals in the heavens : As for the figures printed in some editions of Hyginus, the designers of

them seem to have followed their own fancies in delineating them without any regard to the descriptions of the author.”*

On perusing the former part of this passage, respecting the “Syntagma” of Grotius, my hopes beat somewhat high; but, being favoured with a sight of the book, I soon perceived that our Cambridge professor, and even the learned Batavian himself to a certain extent, had been led into error, and that these asterisms, excepting that they are far better engraven, (by De Gheyn) were not a whit more authentic than those which he decries in the work of Hyginus. In fact, in the best edition of Hyginus that I have met with, (which I found in the library of that acute and learned antiquary Mr. Francis Douce,) the constellations are copied from these very engravings in the Syntagma of Grotius, which shews how much the editor of Hyginus was at a loss on this important point.

What does Grotius write of these asterisms? That they are the images of the stars of Germanicus and Aratus, and are taken from a manuscript (I suppose he means a written book containing also pen and ink drawings) in the library of Jacob Susius, Lord of Grysenoordt; and that he greatly respects them on account of their antiquity. Why does he not mention what he supposed might *be* their antiquity?—He respects them “on account of their antiquity, their expression of old schemes, and other not trivial causes:” stating at the same time, that he sees they are utterly wrong with regard to the situation and disposition, both of the whole constellations and of the particular stars.† Whoever attentively considers these passages, which I believe will be found to be faithfully translated from the author’s Latin, will perceive that, on the main points, they contain no evidence; and the internal evidence of the engravings themselves, is entirely against their admission.

As Grotius knew so much else, we have no right to insist on his being a judge of style of design: had he possessed this judgment, he would have perceived that the pen and ink drawings in question, were of the art of Germany or the Low Countries, and performed soon after the time that the artists of those parts of the continent, in emancipating their style

* P. 173, ch. 2, of Long’s Astronomy.

† See his Preface, Table of Contents, and the article “Hugeiani Grotii Notæ ad Imagines,” p. 30.

from its Gothic angularity and stiffness, began habitually to visit Italy for improvement. I suspect them to be by the senior Goltzius, (Hubert,) who followed this course of study; who was a man of science, and an antiquary; and who, dying at Bruges, at the age of 57, in the year 1583, might have drawn these figures to illuminate Germanicus's translation of the *Phenomena*, for an ancestor (perhaps the father or grandfather) of the Lord of Grysenoordt.

Nor are these Batavian engravings, by any means the most ancient representations that are now extant of the constellations. The oldest figures of the constellations that I have met with, executed since the revival of learning, are in that edition of the *Astronomical Poets of Greece and Rome* which was printed by Aldus in the year 1499: whereas the *Syntagma Arateorum* of Grotius, did not appear till rather more than a century afterwards. They are wood cuts, very rudely executed, and from no assigned authority.—The engraver appears to have hastily perused Aratus or his translator, and to have designed his constellations as he ignorantly conceived them, taking a sort of uncouth care to place a black asterisk, where the poet has mentioned a star of magnitude or of superior splendour.

No great blame, however, can attach to him who honestly does his best. If no ancient authorities were known to exist in the fifteenth century, none could be copied or named. If those planispheres, which are now extant under the name of Ptolemy, are genuine;* they, as well as the Farnesian globe, may be of subsequent resuscitation. Concerning these points I must profess uncertainty. But, under such a disjointed and imperfect state of succession, it will not be thought passing strange, if some of the figures on the cylinders of ancient Babylon, should be found to bear more resemblance to those on the best modern globes, than these of Aldus or than those of Grotius. More accurate attention to the descriptions of the classic poets and astronomers, and to the actual places of the stars, when united to better drawing, would of course con-

* I do not suppose they are genuine. They are vaguely inscribed "delineated according to Ptolemy;" are without date; but were engraven I believe about the middle of the reign of Geo. II.

duce to the production of this resemblance, the same celestial phenomena being in both cases the archetypes; and it is particularly observable in the Engonasis, or kneeling figure of the present gem, (of which I shall treat in a subsequent page :) the chief difference in this asterism being, that the moderns have placed him with his head downward, or in a contrary direction from those of his companions; whereas on the cylinder his figure ranges with those of Boötes, Aquarius, and the rest.

Notwithstanding that in the above Aldus the constellations are far more grossly figured than we now find the ornaments on the commonest Dutch clock, and are cut by some vulgar artist—if such he might be called—to suit the text of the poet, according to his own crude and vulgar notions; yet some of them, as well as the engravings in the work of Grotius,—strange to tell—have been copied as sanctioned examples, upon subsequent occasions. Surely it is high time for an honest statement, that so little observation of form and relative situation of parts, has been possessed by some of the leading authorities among the etymological literati: so forward have they been to press the semblance of graphic art into their service; and so ready to grasp at the caput mortuum of antiquarian research, while the spirit was exhaling in the heat of ostentatious disputation.

How different from all this, Sir, have been the exemplary publications of the society of Dilletanti since you have been concerned in them, cannot be necessary to be stated, where those publications have been seen. A more accurate age of investigation than we have just passed, will not fail to perceive with surprise and regret, how meretriciously Mr. Jacob Bryant, Dr. Hyde, and others, have “*restored*”* (as they term it), and in so doing,

* I much question whether the public is sufficiently aware of, and I am sure it is not sufficiently attentive to, the difference between restoring, as the Dilletanti society has restored, the Greek temples from authentic materials, sedulously sought for and found on the several classic spots where the ruins of those temples stand: and *restoring* from the fancy of a well or ill informed draftsman (as the case may happen) dictated to by a scholar who has a favourite hypothesis to sustain. The wretchedly-etched trumpery—the anonymous misrepresentations—of the Rev. Mr. Faber, to which he has endeavoured to obtain the favourable attention of the public, by the extrinsic means of *dedicating* them to learned prelates and distinguished statesmen, are even worse than the restorations of Bryant and Hyde.

defaced, vulgarised, or falsified, almost every antique they have touched; and how others have confounded the crude conceptions of a cinque-cento wood-carver of slender attainments, with the abstruse mysteries of ancient astronomy; at once acknowledging, and deteriorating the value of, a species of evidence, which when compared with the pranks and vagaries of etymological research—Research! should we call it? (as this verbal harlequinadery is sometimes carried on)—Etymological announcement, rather—is as revealed truth to the very essence of equivocation. I know that the learned scholars that I have named, and others whom I could name, have long since been placed in their niches as men of erudition. They are our friends: but Sincerity “is our sister:” and I am much mistaken if it should any longer be dissembled, that it has been by far too much the custom of this class of writers, to enter the sacred enclosures of ART, without due reverence for the sanctity and purity of its truths. They find her paradise open, and toward her tree of knowledge they rush, combining more than the temerity, with less than the excuse, of our first parent. They devour more of its fruit than they can digest, and canker and bruise more than they can devour. As nothing can be easier than by such means to infuse the colour of a preconceived hypothesis: so nothing in the present state of the science of antiquarian investigation, when the public attention is laudably directed towards the topography and the ancient attainments of older nations than our own, is more seriously to be deprecated.

Reports of the Arabian or Cufic sphere of the Borgian museum, next engaged my attention, and for a while animated my antiquarian hopes. But upon turning to the quarto by Toaldi and Assemanno, it soon appeared that this sphere was not of the indigenous astronomy of Arabia, but was *derived from* the Grecian sphere; and that it bore date 622 of the Hegira, which carries us no further back than into the fifteenth century of our own era. Still however, it must be regarded as a valuable curiosity, and it has some few peculiarities about it, that are probably of Arabian origin. These will be noticed when my subject shall so require. Its figured constellations are rather grotesque than Arabesque: but the principal

stars are individually specified. The Cambridge professor has either not known of this Arabian sphere or not thought it worthy of notice—most likely the former.

The Farnesian globe, which it must be my business to treat of next, appears also to have escaped the researches of Dr. Long. Of the date of its production, we know no more than may be gathered or guessed at, from circumstances connected with its own internal light; which however will bring us at the farthest within a century or so of the mark: though I submit to your critical acumen, that, in estimating it, Count Volney or his astronomical friend M. Nouet, has been somewhat too much in haste to jump to a conclusion.

He says that, (for a purpose which he assigns), “we must have recourse to zodiacs more ancient than the time of Ptolemy. We find *one* incontestably so: it is that of the Atlas of Farnese (thus called from its possessor) of which Passère has given us the figure”—and of which Bentley inserted a copy in his *Manilius*.—“The zodiac of this Atlas belongs to times prior to Ptolemy, since the colure of the vernal equinox passes through the fore-horn of Aries.”*

Now, Passère's copy I have not seen: neither have I seen the original: but according to the engraving by Boitard, which appears in the *Polymetis* of Spence, (and which is better than Bentley's) the colure does *not* pass through the fore-horn of Aries: it only just touches that horn, and touches it so as to divide this sign specifically from Pisces, even as any sculptor would now divide it, who wished to represent the popular zodiac: no more seems here to be intended,—at least, we cannot be sure that more is intended,—since no degrees are marked, and no stars are introduced; and we still in our popular astronomy begin our enumeration of the twelve asterisms of the zodiac, with the sign Aries, notwithstanding that since it was the true place of the equinox, more than two thousand years have rolled away and the colure has moved through the whole of the 30° that are assigned to Pisces. The solstitial colures of the Farnesian zodiac, which in Boitard's print form the boundary lines of the

* Col. Corbet's Translation of Volney's Researches on Ancient History, vol. ii. p. 450, 51.

two hemispheres, are, in like manner, quite clear of the asterisms Cancer and Capricorn.

Had the places of the colures been any where else in this monument, it would have shewn that the moveable zodiac of the scholars, had been in the artist's view: it would have marked astronomical precision; and it would have deserved and obtained credit with posterity. But there is no astronomical *precision* in this monument. The French philosophers have pointed out some inaccuracies with regard to the paws and head of the sign Leo; the backs of many of the human constellations are, without reason or known authority, (even contrary to the authority of Aratus,) turned toward the spectator; the Pisces Australis, though it be of the forty-eight antique constellations, and notwithstanding it contains the star Fomalhaut of the first magnitude, is entirely omitted; and the stream from the situla of Aquarius instead of ending at the fish's mouth, turns eastward and ends at the tail of Ketu; beside which, the Farnesian globe contains so many other inaccuracies, as much to deteriorate its value as an astronomical monument, even though it should be proved to belong to the era when the colure of the vernal equinox *began* to enter the constellation Pisces. In short it is, and was clearly intended to be, no more than the accompaniment, or adjunct, to a statue of Atlas; and is apparently the work of some Roman sculptor of no great merit, and who was but indifferently well informed concerning the constellations. Neither probably, is its assigned date very far from the truth; or its true date far from the time of Ptolemy: Ptolemy died about a century and a half after our era, and the vernal colure moved into Pisces a little more than two centuries before. After this brief statement of my sentiments of the Farnesian sphere, the references which I shall occasionally make to it, will not be unduly appreciated.

Having premised thus much, I shall soon, to the best of my ability, Sir, proceed to submit my explanatory endeavours: But no man rushes into a temple, save him who seeks refuge; due reverence and the requisite concentration of thought, demanding from all but the impious, at least a moment's pause in the vestibule. If Plutarch in essaying to explain the ancient mysteries of Egypt, felt it necessary as well to advert to the difficulties that opposed themselves to his progress, as to breathe the warm

hope which animated him to the task, this preface—which is nearly concluded, may well be thought imperative on me, ere I presume into the Sabæan heavens.

The present monument, like the majority of those Chaldean cylinders which have been brought to England, is engraved on an hæmatite. We are indebted for it to the enterprise of the learned secretary to the Council of the College at Fort William, in Bengal, (Capt. Abraham Lockett,) who himself brought it from the site of ancient Babylon, and placed it in my hands. As the devices of these cylinders revolve into themselves in rendering their impressions, and as such of them as are without verbal inscriptions are also without lines of demarkation, I must be allowed to assume that in impressing them with a view to their explication, I have begun with them severally in the right places. It has often cost me more time and study to ascertain this, than may possibly be supposed; yet I may in some instances have been wrong; wherefore this point must always be understood as being submitted to the reader's cognizance, to be examined by him together with the details of their engraved contents.

Count Volney informs us that the ancients took such asterisms as they found at any given time upon the circle of the horizon, and formed them into significant groups.* That they formed the asterisms which were at those given times *above* the horizon, into such groups, may be shewn; but the same antiques which would demonstrate this fact—the present cylinder is one of them—prove also that they did not take such asterisms as were “upon the circle of the horizon.” I am led to imagine that in the primitive astronomy, more habitual reference was had than at pre-

* See note 95, p. 388, of the English translation (2d edit. Johnson) of his “Survey of the Revolutions of Empires.” This philosopher has been complimented by Gibbon and others for veracity and judgment: nor should it detract too much from these general merits, or from the praise which has been more especially bestowed on his topographical observations, that in the instance which he here produces as evidence of his asserted fact: he is rather romantic and flighty; than astronomical, or judicious, or in any respect critical. He even talks of Ophiucus and the polar Dragon occupying the zenith at the same time: namely when Virgo sinks and Perseus rises—a time when no star of either of these asterisms, occupies this station in the Egyptian latitudes. But if Volney exhibits on some occasions the glare of a meteor; he shines on others with the clear and lasting light of a planet.

sent, to the zenith, and to those imaginary armillary lines or vertical circles passing through it and through the nadir, which, from the Arabian nomenclature of the science, are termed azimuths: and that hence, on the present cylinder, as well as on several others, we find the asterisms represented as traversing the upper hemisphere from opposite points of the horizon—but passing across it obliquely with regard to the meridian and the ecliptic.—The Sabæan gems in this respect vary, but probably vary on principle: sometimes they exhibit only the rising and setting asterisms; sometimes their engraved contents commence with constellations eastward of north, and pass across the upper hemisphere to those westward of south, or in the opposite part of the horizon: at others—as in the instance before us—they reach from the constellations which are setting westward of the arctic pole, toward those which are simultaneously rising in the south-eastern quarter of the heavens: and again at others, following, or nearly so, the course of the Sun; when they consequently consist of such asterisms as are zodiacal:—but this latter may perhaps take place, because, when at or near the season of the solstice, the ecliptic rises so high in the heavens (or so far northward) that the zenith itself is in the zodiac, in all latitudes between those of Babylon and the southern extreme of Æthiopia.

The record of Diodorus Siculus, that the Babylonian astronomers from their lofty observatory exactly noted the rising and the setting stars, is more to our purpose than the assertion of Volney: yet since all stars rise and set, Diodorus should have known and explained that, by *rising* and *setting* stars must be understood what are now termed “the poetical risings and settings:” which is to say—the stars that, as the seasons varied, rose and set simultaneously with each other and with the Sun, or when sufficiently clear of the rays of that luminary to be distinctly visible.

These are termed poetical risings and settings, because, the earliest mention of them is to be met with in the Greek poets; who as we have seen from Herodotus, were the astrologers also of that early period. And they are mentioned by the poets as unerring signs of the approaching seasons, because they were previously regarded as such by the astrono-

mical priesthood of Chaldea and Egypt. It is with this *fact*, on which the poetry is founded, that we have to do at present.

Milton has taken care to express, what Diodorus would not even be understood to have implied, but for collateral light: He says, the great Creator

“ Taught the fix’d their influence;
Which of them *rising WITH THE SUN, or falling,*
Should prove tempestuous:”—

The learned Sicilian being thus understood, I may venture to anticipate the final acknowledgment of the reader that, no far distant point of antiquarian research has been developed and ascertained in a more gratifying manner, than the bearing of this historical record on the engraved truths which I shall have the honour to set before him.

The oldest of the cylinders appear to have been executed before that superior importance was attached to the stars of the zodiac which so universally prevails at present, and which has so long prevailed: and we may here observe that Diodorus, in terming the zodiacal asterisms the chief of the counselling* gods, appears to have mingled what he knew in a vague and cursory way, of the doctrines of the Chaldeans, as those doctrines were current in his own age and country, with what he had read of those of superior antiquity; and as this writer notwithstanding his learning, was credulous and uncritical, we may the more regret the loss of the Assyria of Herodotus, and the paucity of detailed historical

* “ Under the course of the planets, they (the Chaldeans) say are thirty stars (constellations) which they call *Counselling Gods*, half of whom observe what is done under the earth, and the other half take notice of the actions of men upon the earth, and of what is transacted in the heavens. Once every ten days space, (they say) one of the highest order of these stars descends to them that are of the lowest, like a messenger sent from them above; and then again another ascends from those below to them above; and that this is their constant natural motion to continue for ever. The chief of these gods, they say, are twelve in number, to each of which they attribute a month, and one sign of the twelve in the zodiac.”—Booth’s *Diodorus Siculus*, b. ii. p. 70. The number of these “Counselling Gods” of Diodorus, does not agree with that of the ancient constellations: and by no adaptation of the present contents of our sphere, could one of these have regularly sunk beneath the horizon every ten days.—Beside, 30 times 10 would have left the year short by more than 65 days: and if 12 descended in a year, how could one of the 30 descend every 10 days? Again, the more ancient Chaldeans are generally said to have divided their zodiac into eleven constellations only.

information concerning the more ancient dogmata of the Sabæan priesthood. There is however, a remarkable conformity, between our antique cylindrical monuments and the earlier poets, prophets, and astronomers, with regard to the comparative veneration, in which the extra-zodiacal asterisms were held in the remoter periods of time: and the impressive coincidence at which we here arrive, between the art and the literature of far distant ages and nations—between that practice of the Chaldean astronomers which may be safely inferred from the present and other of the more ancient of the cylindrical engravings; and that habitual observation of the stars which is recorded of the patriarchs, prophets, and philosophers, of the sacred scriptures and of Greece,—I repeat, the impressive coincidence between these, at which we here arrive,—is probably the best of all evidence that is now attainable, on a subject so remote in time and place, and so recondite in its nature.

That the extra-zodiacal asterisms *were* thus anxiously regarded of old: that is to say were as much looked to for the omens or signals of which the ancient Sabæans were in quest, as those which lie within the path of the Sun, may be known (to those who believe the scriptural astronomy to be correctly translated) from certain passages in the books of Amos, Isaiah and Job; from those precepts of Hesiod which refer to “Orion and the Dog;”^{*} from Ulysses in the Odyssey being directed to steer by “the Bear;” and from Hippocrates directing the attention of his readers and patients to the heliacal risings of Sirius and Arcturus;[†] of which asterisms, none are zodiacal.

It may further be observed, in connecting these observations with the subject of the present engraving, that notwithstanding it contains five figures, but a single one of them is zodiacal, and that is accidentally so, and apparently in consequence of the circles of Azimuth that are engaged in it, happening to pass across and give horoscopical significance to some of the stars of Aquarius.

I should apologise, Sir, for detaining you so long from the details of this interesting little monument, but you probably perceive that the length of my preamble has proceeded from the early station in my work

^{*} In his “Works and Days.”

[†] In his book De *Ære*.

to which this essay is destined ; and from that desire to connect general, with particular, considerations, which must be common to every writer who endeavours to render his publication useful or interesting.

Like the Grecian horoscope which is the subject of my third essay, it appears to be an hieroglyphical record of the native stars of that individual who was privileged to use it as his signet, or customary pledge of faith and of honour. His birth was nocturnal, as I shall here assume for the sake of perspicuity ; and the moon was not above the horizon at the time—or at least was not visible.

If then the celestial globe be rectified, and the pole elevated to the latitude of Babylon, which is nearly 33° North ; and if the star of the first magnitude, since called Fomalhaut,—which I shall eventually shew to be the south-eastern boundary of the present horoscope—be brought just above the horizon, a series of constellations which correspond with the engraved contents of the cylinder, will be seen to pass across the sphere in the direction already stated : that is to say—as nearly as the cylindrical form, could adapt itself to that of the hemisphere and to the irregular forms and stations of the asterisms, and supposing them to have then existed nearly as at present—they form a sort of diagonal semi-zone. Contrary to the usual order of modern geographical charts, and contrary to our usual habit of perusing such diagramatical exhibitions as bear relation to the cardinal points of the compass (which is a merely arbitrary matter) but, conformably to what has in every age been the general usage of astrologers, the *South* pole of the horoscopical device is here supposed to be upward.

It will easily be perceived that under these circumstances of the sphere, Boötes is far declined, and Ursa Major is setting : the stars *Lambda* and *Mu* in his hinder paw, just reaching the North-western horizon, as that of Fomalhaut ascends from the opposite quarter of the heavens.

I shall beg leave to begin to submit my reasons for identifying our antique figures (or rather the stars which they were supposed to circumscribe) with those of the modern constellations—at these Northern asterisms : presuming, that should classical authorities of sufficient weight, be found to run parallel, or nearly so, to the settled truths of astrono-

mical science, and to the courses of the eternal stars themselves, I shall have proceeded far toward ascertaining the nature, and determining the high antiquarian value, of these interesting cylindrical gems, so long the object of important and unsatisfied curiosity among the dilletanti of Europe; and in so doing shall have raised my feeble voice in favour of restoring to Babylon, if not to the oriental Æthiopia, the heir-looms of her ancient scientific attainment.

The general reader will here permit me to remind him as he looks at the etching which I have prefixed to the present Essay, that Boötes is sometimes called by that name, meaning the herdsman, rustic, or husbandman; and at others Arcto-phylax, or the Bear-keeper. Either or both of these early Greek denominations, have much more pertinent application to our Chaldean figure, than to his modern substitute. This may be seen at a glance.—On his head he wears a mitre or lofty cap, which being turbanned across his forehead, somewhat resembles a Turkish or Arabian head-dress: but it resembles also that of the Hebrew priesthood as ordained by Moses, which in all probability is of Chaldean, or Arabian, derivation. The scale of the gem itself is so minute, that it were hard to say whether the body of this figure down to the waist is meant to be represented as being naked, or habited in the jerkin of a peasant: but around his waist there is evidently a girdle, and a part of his dress depending from it, and reaching nearly to his knees: probably it may be the Asiatic tunic of which Mr. Thomas Hope has given a representation in the 5th plate of his valuable book on the “Costume of the Ancients.”—In his right hand is his pastoral staff, the same which he is still seen to hold as represented on some of the modern spheres: but it has the peculiarity of being barbed at the upper extremity, and it is here remarkable, that Eusebius, quoting an ancient oracle which has apparent reference to this constellation, as formerly represented, writes—

“A mystic goad the mountain herdsman bears.”

The left hand of our herdsman grasps the handle, as it appears to me, of some smaller agricultural implement. Modern astronomy has in some instances rendered it a falx or sickle, but from the angular form of what

remains over his shoulder (for the handle is exceedingly small in the cylinder, and rendered somewhat ambiguous by age,) has perhaps been a hoe; which as it is the most simple, is presumptively the most ancient, of the manual instruments of husbandry. Mr. Bowdich, in his "Mission to Ashantee," writes that the hoe is still the *only* implement used in cultivation by some of the nations of Africa. But if this asterism be as some authors have supposed, (and as I merely hint, for the present,) the Osiris of Egypt under the Greek name Boötes, I should then imagine the implement resting against his left shoulder, to be that instrument or symbol, generally understood to be of repulsion, which on the monuments of Egypt appears to be intended for a scourge; or perhaps a flail;* or a winnowing van.

Immediately before our Chaldean figure, is the Bear (evidently intended for that animal, and by no means ill drawn) from which he obtained his epithet Arctophylax: and over his left shoulder, is an eight-pointed asterisk, which must be intended either for the conspicuous and brilliant star Arcturus of the first magnitude; or else (and as I rather think) for the important star of the North pole since denominated Cynosura, which still beams, though at a considerable distance, from above the shoulder of Boötes.

The reasons on both sides may be found not unworthy of a little consideration. Modern astronomy, without a standard in these matters, and therefore but too much exposed to innovations, has placed Arcturus in some instances within, in others very near, the girdle of Boötes, and again in others at a short distance before his left knee: but we learn from Aratus, who is reported to have poetized in his "Phenomena" the sphere of Eudoxus, that this splendid star there stood alone, forming in the beauty of its brightness, a constellation by itself; words, which though grammatically incorrect, may nevertheless be astronomically true: for several of those brilliant spots in the heavens, which simple unassisted vision regards but as single stars, the telescope has shewn to be clusters. However I here use the term constellation in a practical sense, and in

* I since observe that both Mr. Christie and Dr. Prichard, who appear to have studied the mystic symbols with great attention, pronounce this to be the Van; or winnowing implement of Egypt; but Denon calls it a Scourge.

conformity with a passage of Aratus, at which we shall presently arrive.

On the other hand, in favour of the claims which will probably be found to preponderate on the whole—of this eight-pointed asterisk to be regarded as the Pole-star—and collaterally in favour also of the remote date of our miniature monument—is the well ascertained fact that in the higher periods of antiquity, but a single Bear appeared on the celestial sphere. Homer mentions but one. Anacreon (as translated by Fawkes) writes—in strict conformity with the representation before us,

——“ Strong Boötes urged the Bear.”

Of the lesser Bear, the knowledge was introduced into Greece from Phœnicia, by Thales; who according to Herodotus, was himself in fact of Phœnician origin. It is true, Thales and Anacreon were living at the same time: but we are not to suppose that the indolent votary of music, love, and wine, cared to make himself *immediately* acquainted with the discoveries of *barbarian* astronomers. By the time we arrive at the age and the sphere of Eudoxus, we find an express acknowledgment of the existence of two celestial Bears: Aratus mentions both, and with them mentions Arcturus, as I have noticed above; and also both the Greek appellations of the constellated figure by whom the Bears are followed, with the reasons for their being conferred—as far as those reasons were known to, or were not disguised by, the Grecian poets and astronomers.

As, unhappily for the task I have here undertaken, I am no scholar, I shall beg leave, for the convenience of the general reader, as well as on the score of my own deficiency, to cite the verses of Aratus as they have been rendered into English by Mr. Thomas Noble, the English translator also of the Argonautica of Apollonius Rhodius.

“ Behind the greater Bear, with rustic mien,
Arctophylax; their keeper, next is seen :
By men Boötes named, for he appears
To drive those waggon forms we term *the Bears* :
Bright his whole figure : but *beneath his zone*,
One star, by its appropriate lustre known,
Arcturus,—with no other star combines ;
But, in itself a constellation, shines.”

The truth appears to be that the real origin, if not the primitive Babylonian names, of these arctic asterisms, were alike unknown to Homer and to Aratus—at least, if some of the names were known, the reasons of their being conferred, were not.—They were not to Homer, or (as your tasteful friend Mr. Uvedale Price has remarked on another occasion) he would certainly have told them, and they would have been repeated by Aratus; nor would either of these poets have left us to doubt or determine between Bear, and waggon.—And, as to the classical legends of later date, I need scarcely remark, that they are unsatisfactory, and at variance with each other—In short, are palpable fables, inconsistent with the celestial appearances, and even with themselves: and too grossly fabricated to call for much refutation. However, a word or two, we may bestow.—

For these constellations to have belonged to the story of Icarius and Erigone, the bear should have been a dog, and the virgin Erigone, should have grouped with her father; certainly she should not have been so disconnected from him, as is the sign Virgo from Boötes. That of Calisto and Arcas, which Ovid has told in his *Fasti*, appears to be somewhat more pertinent; yet to have agreed with our gem, or with the modern spheres, Boötes should have been a beardless youth, and should have wielded a hunter's javelin.

“ For when her son attain'd his *fifteenth* year,
He in his hunting, met his mother Bear :
She stopp'd as if she recogniz'd her son ;
And would have spoke, but she could only groan :
A sudden *dart* the youth surprised had thrown,
And kill'd his parent, tho' to him unknown :
But Jove in pity, raised them quick on high,
And placed their bodies in the starry sky.
Conjoin'd on earth, he would not there disjoin
Their constellations.”*—

I can have no right however, to push the classic poets rudely, or too far, toward the point of responsibility. Some of the variations in their

* Massey's Translation, b. ii. ver. 217, &c.

accounts of these astronomical legends, may have proceeded from the imperfections that are incident to early efforts in the imitative arts. For example, it cannot excite our surprise, that in the infancy of art, quadrupeds should be so ill sculptured, as in some instances to render it doubtful whether a Bear, Boar, Dog, Tyger, or Cynocephalus, was intended by the artist. Is there not then reason to suppose that in the more ancient planispheres (of whatever nature they were) the celestial Bears might sometimes be so ill defined as to be occasionally mistaken for the above animals? Or *vice-versa*: for in truth, I possess an example where an ape is the representative of the lesser Bear; and the appellation of one of its stars that which so proudly specifies the northern pole—can only be accounted for on the supposition that this ape was, on some ancient and standard occasion, represented with the tail of a dog.—But the Bear of the present hæmatite is sufficiently explicit.

I feel conscious that I am here at the very nadir of the sphere of my antiquarian aspirations; yet here I shall take a station in favour of astronomical sculpture. I have dwelt the longer, and with the less reluctance, even on these dubious points of minor importance; because, compared with such unchangeable records as the antiques that are now before us when taken with the relations which I flatter myself I shall be able to establish between them and the celestial phenomena; poetry, and such verbal mythology as that of Mr. Jacob Bryant and his school—"dart furtive beams and glory not their own."—Sculpture, when even at the very worst, is less illusive evidence than sounds derived from those remote ages when language was merely vocal.—"Words (says Dr. Johnson) are the daughters of Earth, but things are the sons of Heaven!"—How applicable this, and more especially the latter member of the sentence, to our Sabæan engravings when regarded as the legitimate progeny of the primitive astronomy! the pliant playthings of scholars must bow down before the stubborn facts of fine art and the majesty of science, when thus indelibly recorded. And, when truly interpreted—when we shall be able thoroughly to decypher and understand the engraved hieroglyphics of Assyria, the story of Babel and confusion, will seem but an ancient prophecy fulfilled in the literary babble of modern times.

It must be allowed that the learned in words—the etymological mythologists—have been at great pains to establish the identity of Osiris with the Sun. Others at no less cost of time, ink, and solicitude, but with better success, would persuade us that he was in reality no other than the patriarch Noah: or that he was Bacchus, Iswara, Thammuz, Adonis, Janus; or that he was all of these, Boötes having been inadvertently left to be now called forth from his Babylonian sepulchre, by an humble and unlearned individual.

How little would it be to the credit of the modes of research adopted by the Bryant school, should there always have existed circumstances respecting the identity of Osiris with other mythological personages, to which they have never adverted; and which, being founded on the mathematics and the stellar motions, are irrefragable and unvarying in their nature.

I think there are such circumstances, and that they are intimately connected with those mystic ceremonies, and those lamentations for the lost Osiris, Thammuz, or Adonis, on which the literati have so frequently dwelt, detailing every local particular with great apparent exactness—save and except those very astronomical phenomena which should most have engaged their attention.

Of this often told story, the version of the Rev. Mr. Faber is more brief than most, and as clear and explicit as any; unless we should except the more detailed account of Dr. Prichard. In celebrating the mysteries of Osiris or Thammuz, Mr. Faber says, “the god was at first bewailed as one dead, and after a certain time had been allowed to elapse, his supposed restoration to life was celebrated with most riotous mirth and most frantic acclamations. To these rites we have frequent allusions in scripture, for they prevailed in Palestine as much as in Egypt; the women who wept for Thammuz, bewailed the dead Osiris or Adonis.”*

This “certain time” of the absence of Osiris, has been variously specified; as if it were *uncertain* time in the knowledge or opinion of its reporters. The truth is, that, it has really undergone some variation from

* Classical Journal for March, 1820, p. 12.

age to age, owing, as I shall explain hereafter, to the precession of the equinoxes; and has varied still more, on account of the difference of the latitudes of the various countries where the mysteries were celebrated. Having been thus variously specified without advertence to the causes, the majority of those gentlemen who have treated the subject, have chosen to allude to the time occupied in general terms. I observe, Sir, that, on the authority of Theophilus, your "Inquiry" states that the Osiris of Egypt was supposed to be dead or absent, forty days in each year, during which the people lamented his loss, as the Syrians did that of Adonis: and I shall in the sequel shew that this period has reference to the latitude of the reputed birth-place of Osiris, (that is, the place of his introduction into Egypt) as well as some relation to the more southerly latitudes of those Sabæan, or Troglodytical tribes who, according to the "Ancient Universal History," and to Bruce and his authorities, were the descendants of the patriarch Cush, and the first conquerors, or the founders, of the very ancient city of Thebes.

On the subject of the early migrations of the Cushites, and their progress in astronomical science, the two first chapters of the second book of Bruce's travels, may be read with pleasure and advantage: but not with implicit faith. The historical notices of Bruce, should be compared with the geography, the genealogies, and the chronology, of Volney's "Researches." For our present purpose, it may be sufficient to mention that, the two learned travellers agree with regard to the remote antiquity and Cushite extraction, of the Æthiopians: but, while the former supposes that Cush and his family migrated to Astaboras and the eastern shores of Africa, by the way of Egypt; the latter conducts them by a more south-easterly, and more probable, route—peopling the Arabian peninsula and crossing the Red Sea, previous to their invasion of Egypt.

I feel some little surprise—though perhaps I ought not—that learned gentlemen who have *literally deluged* philosophy and free inquiry, with their incessant references to Noah's flood and his miraculous preservation, have omitted to notice the circumstance, that forty days is precisely the time, as recorded in Genesis, that the waters were pouring down upon the earth, and it was at the distance of forty days after the ark

grounded on Ararat, that Noah is stated to have sent forth the dove. These coincidences are certainly worthy of being remembered, and I shall return to important considerations that are connected therewith, in the course of those speculations on the Osirian mysteries, which have grown out of my Sabæan researches; and more especially out of my study of the present gem.

Further, the authors of the "Ancient Universal History" state, that "it is remarkable that the day assigned by Moses for the beginning of the deluge, agrees exactly with the day wherein Plutarch tells us that Osiris went into the ark, viz. the 17th of Athyr, which month is the second after the autumnal equinox, the sun then passing through Scorpius; nor does it differ above a day or two, from that set down by Berosus."—But, as learned commentators vary so widely as to "the day assigned by Moses," and as to the commencement of the antediluvian year; and as I do not find that the sun was, or could have been, in Scorpius, the second month after the autumnal equinox—I shall not here venture on the revisal of a computation which might carry us too protractedly away from our proper subject.

It will be recollected that the author of that classical treatise "on the Syrian Goddess," which you have remarked to be erroneously attributed to Lucian, was present at Byblos at the season of the celebration of the rites of Adonis, and saw that head of papyrus, which by the vulgar was believed to arrive there by an annual miracle. How should this mystery be interpreted? Did it not mean that in the early ages, before such astronomical instruments as we now possess were invented, or when only those of comparatively rude construction were known, the Sabæan priests were, from a migdol (or sacred observatory) hereabout, accustomed to see the bright star *beta* in the head of Boötes, (which is the chief star of the constellation when Arcturus is excepted), and which had sunk in the Mediterranean sea, rising in the eastern hemisphere, after an absence of forty days? Affirmatively, this was my first idea: but it is erroneous. I afterward, by bringing together history, chronology, maps, and the celestial sphere, learned to correct it, and to vary the true account: and I found that its astronomical, and geographical, variations, run pa-

rallel to those which are best attested of the attendant historical relations of the mystic ceremonies.

But we may not dissipate our powers of attention, among the details of this legend. Dr. Prichard has ably recounted the whole of the mythology of Isis and Osiris, with all its localities: and, to his learned "Analysis of the Egyptian Mythology," I beg to refer those who may desire information on this head. My present business, is, not to follow him and the classical writers, through the details of the festivals of the Disappearance, Search, and Resuscitation; but, principally, to shew that Osiris, Bacchus, Boötes, and Noah, are only different names for the constellated Husbandman.

The longer and shorter spaces of time that were occupied in these various rites, are all to be accounted for upon a correlative system of principles. When the astronomical priests of the lower latitudes of Egypt and Æthiopia, beheld the first, or the chief, stars of the Husbandman, sink acronically beneath the western horizon, they began their lamentations,—or then was held forth the signal for others to weep: when his prolific virtues were supposed to be translated to the vernal sun—and not, I believe, when the first of his ascendant stars reappeared in the eastern hemisphere—Bacchanalian revelry became devotion. In all places the rites began with lamentation, and in all ended with rejoicing: but the time varied in different ages and nations.

The varying accounts, can in no other way be rendered consistent with regard to time and to each other, than by reference to the concomitant astronomical phenomena,* which must necessarily have varied in different latitudes, and in different ages. In most instances—I believe we may say in all—the season of rejoicing, was that of the spring: "the common time for their solemnization (says Plutarch) was within that month in which the Pleiades appear."

Before the colure of the vernal equinox had passed into the Ram; and

* The astronomical details which have direct reference to this celebrated legend and to these deified stars of the Husbandman, are of too much importance to be here entirely dismissed, and would be too long to be here entirely discussed and inserted. I must therefore postpone the honour of submitting them to a future essay.

after it had quitted Al-debarân and the Hyades, the Pleiades were for about seven or eight centuries, or perhaps longer, esteemed to be the leading stars of the Sabæan year. It is not meant that the vernal colure continued to pass exactly through this cluster of stars for the above space of time; but, that there were no other stars of the zodiac, between the Hyades and the first degrees of Aries, sufficiently near to supersede them by serving as an astronomical mark. On the Pleiades and their vernal ascension I have more particularly dwelt in my subsequent essays on the cylinders of Sir William Boughton and Mr. Rich; and through the period of their astronomical reign as leading stars, run the earlier astronomical notices of the Greeks and of our own scriptures. Hence the correct beauty and congeniality of Milton's feeling in describing the heliacal rising of these stars—

——“ the *grey dawn* and the Pleiades
Shedding sweet influence :——

Hence too the great number of antique monuments of all the Sabæan nations, where the disc and crescent—the symbols of the sun and moon in conjunction—appear successively; first on the head; at subsequent periods on the neck or back, of the zodiacal Bull; and more recently on the forehead of the Ram. It was the hieroglyphical sign of the important transit of the vernal equinox, and of the rejoicing-festival which closed the annual rites of Osiris.

I feel here in fresh danger of running into digression, but since “ the light that leads astray, *seems* light from heaven :” I hope, sir, you will pardon my obedience to the impulse, should this apprehension turn out to be well founded.

The diagrammatical character, or symbol, which is still in use to denote Taurus, ♂, is in fact, this very crescent and disc; the horned moon, which in the ancient monuments is placed beneath, being now (with more analogical propriety) placed above, the disc of the sun—but, transmitted, no doubt, down to our times, from those far distant ages when this memorable conjunction in Taurus, by marking the commencement, at once of the Sabæan year and of the cycle of the Chaldean saros, so

pre-eminently distinguished the sign Taurus, as to become its characteristic symbol: for had the abstract shape of a horned bull's head, been the origin of this diagram, as some authors have surmised; the form beneath the crescent, would not have been a circle, but a triangle.



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There was even an antique Taurus of bronze lately consigned to Mr. Christie from China! in which bronze, the symbolical crescent remains attached to the back of the bull by means of a quaint Chinese cloud, and where a curved groove is provided for the occasional introduction of the disc of the sun, when Mazzaroth was in its season—that is to say, when solar and lunar time were coincident and conjunctive at the commencement of the year and of the lunar cycle.

This bronze must have belonged—not to those very remote ages when

the year opened with the stars in the *head* of the bull, but—must have been in sacred use, when the colure of the vernal equinox, passed across the middle; or, across the later degrees, of the asterism Taurus, and the Pleiades were perhaps in China—as they were in Canaan—the leading stars of the year. Without any unprecedented stretch of fancy, we might have conjectured it to have originally belonged to that “temple or palace of the horned bull,” to which you have alluded in your learned “Inquiry,” and which I have before mentioned in one of my letters to Capt. Lockett: but, since this idea crossed my mind, I have met with another bull, exactly resembling that sent from China, but of somewhat larger dimensions, in the British Museum, which implies that such bulls—perhaps such temples—were not very uncommon.

Along with a representation of this curious Chinese monument, of which Mr. Christie has obligingly permitted my son to make a drawing, and which so unequivocally displays the taste and style of art of the country where it was produced—I have the pleasure to exhibit a Babylonian, a Phœnician, a Greek, and an Egyptian, Taurus.

The small bronze, which in the usual station of the Pleiades, has the hump which distinguishes the cattle of Hindostan, and which has also the lunette horns of the heifer Baâl, was brought from Babylon by my friend Capt. Lockett. Of those with the sun's disc between the horns, the smaller was purchased in Palestine by Sir William Rouse Boughton. It is represented as having been thrown down—merely for the sake of a little picturesque variety in the composition—yet so as to shew the crescent and disc, with its minute aspic fastening of Egyptian derivation. The little Grecian Taurus, is from a cast in Tassie's interesting collection, and was originally impressed from an engraved onyx in that of the Chevalier Wisden. Raspe mistakenly (as it appears to me) terms this a Dionysiac bull, and says it has the three Graces between the horns: whereas it is the Taurus of the zodiac, having the personified Hyades* on the head of the bull and the seven stars of the Pleiades arranged along

* The Hyades, as is well known, were five in number. In the present instance the minute scale of the gem, and the laws of perspective, conspire to prevent more than three from being visible.

his back. What confirms me in this opinion (Sir) is, that it represents the celestial bull as you have yourself spoken of him, "in the attitude of attack, and as if striking at something with his horns;" as he sometimes appears on the later monuments of Egypt, as well as on the earlier of those of Greece:—By the way—may it not be suspected, that whenever he is thus represented in the sculpture of the former country, such sculpture is not of earlier date than the Macedonian conquest?—The dissonance between this violent action, and the calm solemnity of that early Egyptian art which is certainly indigenous; and the exact correspondence of this butting Egyptian bull, with those on the gems and coinage of Greece, strongly incline me to this opinion.

The remaining bull of my group (of antique Tauri) I intended should have been copied from one of the Egyptian bronzes that repose in our national collection: but the room which contains them, is unluckily locked up, and likely to continue so for some months, on account of its containing also the antiquities sent home by Mr. Salt, which are not yet accessible to the public. I owe this apology to my readers, for shewing so little more of the bull of Egypt, than the head and horns—not copied (I am obliged to confess), from any one specimen, but recollected from several: The figure, which should else have been more prominent, contains however the astronomical disc and crescent, marking the vernal equinox of the more remote period, and which I am very certain will be found on the heads of at least three of the bulls in the small Egyptian room at the British Museum.

For the information of some of my readers, I may here be permitted to mention that the disc above the forehead of Taurus in these antiques, was not always a fixture. Nor could we in ancient monuments of this nature, have possibly met with a plainer indication of a moveable festival dependent on the occasional conjunction of the two greater luminaries, than is presented to us in the circumstance of many of these antique bulls of bronze—those of Greece as well as those of Egypt—having holes remaining on their heads, evidently contrived, and with very remarkable correspondence with the groove of the Chinese bronze, for the periodical reception of the symbols of the sun and moon—either or both of them,

as the state of the material heavens might demand—which were, in their respective seasons, attached by means of metal pegs fitted to the holes. Upon these sacred periodical occasions, Taurus was publicly produced with his proper astronomical decoration as, according to Herodotus, the mystic bull of Mycerinus was produced at Sais. Nor needs Mr. Payne Knight be reminded of two of these antique Tauri of fine Grecian workmanship (having such holes remaining) in his own unparalleled museum of bronzes.

But, forewarned by the fate of Europa, I must not allow this decorated bull of bulls to seduce me from the terra-firma of my original purpose. Returning therefore, from this collateral branch of our subject,—we might have supposed the present gem to have had reference to some such annual festival, and to have been used in the sacred ceremonies, had the place of the Sun, been here specified or indicated: Had the Sun been shewn in Aquarius, the allusion to the acronical setting of Boötes and the Bear, would have been sufficiently obvious and remarkable. Not being quite certain however, that this state of the heavens is not alluded to, I shall return to the problem, before I close the present speculation. Aquarius, who has sometimes been pronounced to be the pourer forth of the Deluge, is rising at the farther extremity of the engraving, and is pouring forth his flood of waters on a small orb which is nevertheless very distinctly made out. Has this any recondite allusion to the Chaldean deluge of Noah or Xixuthrus?

Each of my readers will decide this question for himself. I shall merely observe for the present, that in almost every nation of antiquity, there are either written records, or traditional accounts, supported by fossil vestiges, of a deluge; with evidences of its having been attended by disruption of the subterranean abyss. If before the invention of letters, any marvellous occurrence was hieroglyphically recorded among these sacred engravings, of which I conceive the earliest to have preceded all literature,—surely an advent so important would not be passed over; and of all the nations of the East, we may reasonably expect the most authentic accounts of the Deluge, from the progenitors of the Abrahamic race. Indeed, I have already had occasion to shew, and shall have

more—that other scriptural events and scriptural personages, are introduced or alluded to, on these curious miniature monuments of antiquity; and that the Greeks—perhaps also the Egyptians—from imperfect acquaintance, or from patriotic fraud, have disguised some of these primitive Assyrian and Ethiopian personages, whom posterity may one day restore to their stellar honours and their historical rights. Without rambling too far from our immediate subject, a few more words may perhaps be employed without subsequent regret, in endeavouring to ascertain, or identify, the important constellation before us, ere we pass on to the south westward.

The forty days, or other period, of the absence of Osiris, has by the classical writers, been repeatedly said to have been spent with Persephone in Hades. This must be regarded as a fabulous and Greek construction, of a date long posterior to the Chaldean or Ethiopian origin of the ceremony; for, as you have yourself recorded, Sir, “the ancient planetary worship, preceded the symbolical.” But the lamentations for Thammuz or Adonis, could not have lasted for forty days; nor have been—as has been inconsistently supposed by Macrobius and others—on account of the *absence* of the Sun; whose time of absence, if supposed to be longer than for a single night, must have been fabled to be for the whole of the winter. Why have I said, if supposed to be?—Because the fact is notoriously otherwise; and it cannot but appear odd that so many mythological inquirers, should have conspired to forget that the Sun is *not* at this season absent or invisible; but on the contrary, is seen every day as usual; his course being only somewhat shorter—not suddenly so neither—and more southerly.

If therefore Boötes be Osiris; and Osiris, Adonis; neither of these latter could have been the Sun, or have been supposed to be so, but by mistaken perversion or misappropriation, proceeding from a cause which has already been adverted to as a source of popular error. Yet with the interesting Greek fable of the loves of Venus and Adonis, they may be astronomically connected; for it would of course happen occasionally that the planet Venus, while in the course of her alternations, she was a morning star, would rise, and at other seasons would set, with the stars

of Boötes—that is to say, about the same time, or one immediately, or at a very short interval, following the other: An astronomer, by retrospective calculation, might easily ascertain when the planet Venus set just before the constellation; and when, setting soon after, or dimmed and gradually extinguished by the superior light of the rising or setting Sun, she might be fabled to follow and mourn her favourite.

The variations in the ancient legend of Isis and Osiris, while they indicate a varying cause, shew that the classical writers were uninformed and unconscious of the existence of that cause: In short—as my Lord Verulam has well observed—they sometimes discover themselves to be *but transmitters* of what they either did not understand, or chose to disguise. Aratus tells two different stories of the origin of some of the constellations; and even the accomplished Ovid after assigning three for some of the Roman festivals, candidly confesses his ignorance, or his doubts, of their truth. If, imitating this candour, the modern scholars—those who have so long been inconsiderately wedded to the difficulties and inconsistencies that attend on the supposition of Osiris or Adonis being the Sun,* and which have obliged them to excuse, for the solution of their enigmas, from Egypt and Syria to Upsal and the pole;—If they were to resolve to repudiate and rid themselves of this shackle on antiquarian liberty of opinion;—If with me they will agree to read (each in his favourite version of these mysteries,) BoöTES, for Adonis, Osiris, or the Sun; and for the Boar, the Bear—we shall have arrived at a means of explanation more facile, and in much better accordance with the simplicity of those early ages when the ceremony of weeping for Thammuz may be presumed to have originated,—than is afforded by the circuitous decypherings of the Bryant school, or even by the explanations of Plu-

* Had it been my fortune to have met with Dr. Prichard's book, to which the inquisitive reader has been referred for the particulars of the Osirian legend, before I had proceeded so far with my own, it had probably been better for my readers and myself. That erudite work, contains however, no demonstration that Osiris was, or was not, anciently understood to be the Sun, or that he was not a constellated personage of very remote antiquity. I have ventured to exhibit reasons why it could not contain any other than disagreeing specifications of the seasons of his disappearance and resuscitation.

tarch himself: for Boötes is annually and of necessity, pursued from the horizon by the lesser Bear—by that Bear, of which Thales brought the knowledge into Greece; but which was previously known either as Bear or Boar to the Sabæans of Syria, after whom it was named Phœnicé.

But in truth, it is well known, that, neither does the *greater* Bear *set* till we arrive at latitudes considerably to the southward of those of Homer and of Greece. Wherefore we have here in Phœnicia, an astronomic interpretation of all the leading traits in the poetic legend of Venus and Adonis. The addition by Hevelius, of the coupled Hounds, to the constellation Boötes, is in strict conformity with that ancient fable which tells of the early sports of the favourite of Venus. The celestial phenomena therefore occasionally presents us with his *morning* hunt when he pursued the Boar* over Mount Lebanon—the more ancient Byblos being an inland city seated on part of this mountain:—we have his allegorical death by the Boar, in consequence of the circumvolution of the stars round the arctic pole: and we have the serene brightness—the smiling beauty—of the planet-goddess while the stars of Adonis were above—and her comparative dimness as those stars sunk beneath, the horizon: or as the ascendant light of the greater luminary, preceded his actual appearance. The remainder of the fable is explained by our supposing an opportune configuration of the planet Mars, with that of Venus, and with the stars of the Hunter and the Bear.

I can only hope here, that without warping the judgment of the general reader, I may impart some portion, at least, of the pleasure I feel in these endeavours to trace and interpret ancient fable by sidereal facts: yet I am bound to recollect, what must prevent me from being over sanguine; namely, that poetry delights in those warm and florid hues which imagination wildly flings over its objects, while my facts have the coolness and silence of the light of the moon and stars.

* Boar or Bear. One of the celestial Bears I think must have been represented as a Boar on the Phœnician planispheres. And it may be remarked here that the more ancient pole of the equator, not being exactly where it is at present, (nor, of course denoted by the star Phœnicé, or Cynosura,) the stars of Ursa Minor must have had more decided circumvolution than at present, and may have more decidedly pursued those of Boötes.

On the whole, I confess that I am not without a cheering feeling amounting almost to faith, that as my mode of explanation carries the mind nearer to the permanencies of nature and to the soundest of all species of truth, than some others, it will obtain that due preference over the etymological process—though it may not over the poetical,—which Nature (especially when she walks hand in hand with Geometry) sooner or later, generally obtains over Art, when they come in competition.

Returning to our proper antiquarian pursuit—Are these profane personages (Adonis and Osiris) recognisable by other names in the sacred records? This may be more difficult to determine, than to disallow the visionary fables of some of the later classic poets. Thammuz, I believe, in the Chaldee and Hebrew languages is literally the *wonder*! In the Greek it is the same, with a slight variation in the ultimate syllable.—The rainbow was known by that word, in the sense that we should now say the *phenomenon*. The wonder (one should suppose in the present case,) must virtually have resided in the reappearance of the submerged asterism; which was hailed with acclamations. The women wept* for Thammuz that they might afterward rejoice.

Or, with yet more probability (as will subsequently be explained) the women might weep for the wonder, supposing it to consist of the (yet more wonderful) translation of the genial virtues of the submerged stars, to the vernal Sun:—and this upon the same principle that Milton's Lapland witches are described as dancing and making hideous noises, "to assist the labouring moon."

From Kircher may be learned that the seven principal stars of Ursa Major, were once known (I suppose in Egypt and during the earlier ages) as the Car of Osiris. This is curious; because boat, or *Ark*, of Osiris, appears to be meant. Such boats or arks are frequent among

* The *weeping* of the women for Thammuz, must have been commuted, either for some mourning habit which they wore during the season of the ceremony; or the forty days must have been commuted for as many hours—I should rather have said minutes: for what woman except Niobe, ever wept forty hours at a time?—I believe veils are somewhere in scripture mentioned as having been worn on the occasion by the modest dissemblers: and I recollect that Plutarch, in the uncertainty which attended on these mysteries even in his time, brings down the forty days of mourning to four; and some other writer, if I am not mistaken, to one.

the Egyptian hieroglyphics; and in their planispheres are seen floating near both the poles. It is further curious, as referring to the passage already quoted from the *Universal History*, wherein Plutarch expressly treats of the inclosure of Osiris in the ark,—an annual commemorative ceremony, which he says took place on the 17th of the month of Athyr: and which, according to the authorities above cited, corresponds with the day assigned by Moses for the beginning of the Deluge. If then in the remoter ages, these stars were thus constellated, they must have occasionally appeared to rise over Ararat, from those Chaldean observatories (termed *Migdols* in the Hebrew language, and probably in the Chaldee,) which were within view of that mountain from the southward.

To the earlier parts of the Bible history, including the book of Job; and to those torn scraps of record which have descended to us through Berossus; his Sybilline daughter; Abulfaragius; Moses of Chorene; and others; respecting those powerful Sabæan nations whose existence preceded the civilization of Greece; (which scraps are ably treasured up in Pococke's *Historia Arabum*, and in the last work of that distinguished French traveller and chronologist who has been already named) great consideration is undoubtedly due, and from them perhaps much of astronomical meaning may yet remain to be extracted: nor is plausibility wanting in support of certain opinions of Volney respecting those very ancient personages, whose stellar, or whose earthly, existence, we are now discussing; nor rational stimulus for further inquiry. Yet it should be remarked as a seeming inconsistency, that in the engraved planisphere which the French philosopher has prefixed to his "*Ruins of Empires*," he marks the same constellation as being Boötes, Adam, Osiris: but in the twenty-eighth note to that work, he would identify Adam with Boötes; and Noah, as a separate personage, with Osiris, and also with Saturn, Xixuthrus, and Janus.

Can any thing be said upon this occasion in the way of reconciliation, which here would amount to virtual identity? Certainly there are points of agreement between these primitive personages. Each has pretensions to some species of priority. Perhaps this Husbandman, Hunter, or Herdsman, (now called Boötes) was in reality *the first* human asterism of

the most ancient sphere or "Chamber of imagery," and in this ab-originality, may center the first of men, Adam; the first of kings, Osiris; the first, or eldest, of gods, Saturn; the first of post-diluvians, Noah, or Xixuthrus; and,—with the addition of his ante-diluvian face, Janus.

A Phœnician demi-god is mentioned by Sanchoniathon, whose proper name being, like Boötes, a Greek word of meaning, must have been supplied by his translator, Philo-Byblius, but, being the synonyme of husbandman, it shews that husbandman must have been the word in the original Punic, or language of Phœnicia; and in other respects, this part of the mythological record of Sanchoniathon, (if it may be presumed to have ever existed) is luminously applicable to our present purpose. His *Agrotes*, should be an Antediluvian, as well as an husbandman; and having been of the ninth generation—which is the very era of Noah*—should the leading features of his history agree in other respects, we may with small licence of conjecture, believe him to have been *the patriarchal Husbandman*. I can scarcely too often reiterate that ancient names are a very inferior, and often illusive, species of evidence, when compared with well attested facts, supported on science. If the averment of Sanchoniathon be true, that *Agrotes* was the first of whom a statue was made, and who received divine honours, we cannot well believe in a general deluge,† without concluding the Husbandman-deity of Phœnicia to have been the venerated patriarch of the renewed world.

The words of the Phœnician historian, as rendered by the authors of the *Universal History*, with small aid of paraphrase, for the sake of omitting foreign matter, are as follow—"By these (of the eighth generation) were begotten others, of whom one was called *Agrotes* (the Husbandman) who

* Noah was of the tenth generation, if we include Adam, and is generally so reckoned: but since Adam was created and not generated, I think it more correct to reckon Noah to have been of the ninth generation.

† Sanchoniathon is accused of having suppressed the mention of the Deluge, out of respect to the posterity of Cain:—but I leave that matter with Bishop Cumberland. And the doubts or disbelief of the authenticity of the theogony of Sanchoniathon, I of course, leave with those who entertain them, desiring to derive no more support from that real or supposed record, than they may be voluntarily pleased to allow.

had a statue much worshipped, and a tabernacle (or ark) carried about by one or more yoke of oxen in Phœnicia; and among those of Byblos he is eminently called the greatest (*first*) of the gods. *Husbandmen, and such as use dogs in hunting*, were derived from Agrotēs and Agrus, and they are also called Aletæ and Titans.”*

To all of the above *first*-men, with the exception of Janus (whose symbolical attribute is a key) the falx, or sickle, and pastoral staff, are common. I might add, that a modification of the implement held against the left shoulder of our Babylonian figure, is also common, taken with that latitude of interpretation which belongs to its dubious appearance and small dimensions, which render it so difficult to say whether flail, hoe, scourge or van, is intended by the engraver.

—My authorities here are not mean. For Adam, Noah, and Xixuthrus, there are, the book of Genesis, and an authenticated legend of Chaldea; for Osiris, there is the learned treatise of Plutarch; and the historical records of Herodotus and Diodorus; which agree, as do all the early and genuine accounts, in stating that he was wedded to *Isis*.

Of the various interpretations of this real or allegorical personage, *Isis*, that which pronounces her to be Nature, or the passive power of terrene production, appears to be worthy of decided preference. It might seem too much like a pun, to call an agricultural king who really existed—one who had figuratively wooed, and was wedded to, Nature, a *Husband*-man; yet this is Pezron’s interpretation, and is applied by him to Noah and to Saturn; who according to this writer, were the same individual. In troth the *single* meaning is in sound analogy: NATURE, of course, survived this first king, if such he was, whether treacherously murdered or not; and by the same parity of reasoning, grieved at his obsequies, as the classical authorities have asserted.—But in this case the canonization of a mortal chief appears to be meant, and not, as Macrobius and some other authors have supposed, any sacred rites in honour of the immortal orb of day. Nor should we omit to notice here, that this reasoning applies also, by analogy, to the constellation before us, whose disappearance in the lower latitudes begins to take place during the brumal season, when *Isis*, or Na-

* Ancient Universal History, vol. i. p. 88, folio edit.

ture, mourns, almost without a metaphor; and of course rejoices at his return in the summer. Which of these is the most likely to be the physical and literal, and which the mystic or analogical, sense, every reader will judge for himself.

With regard to the deified Husbandman Saturn, I cannot, Sir, have better authority than your own, that the very word is derived from *Sator*,* the sower, or planter, (which I suppose has its root in some older language than the Roman) and to which I believe may be added, that the season of the Aphanism, or departure, of our constellation, is that when seed is committed to the earth: by the way, this does not differ, more than a few days, or a few degrees of latitude, would reconcile, from the season of that heliacal rising of the star Fomalhaut,—which, as I have before intimated, may possibly be intended to be expressed on the cylinder.

My references here, have been chiefly to the sacred rites of Assyria, Phœnicia, Egypt, and Æthiopia; but, during the earlier Sabæan ages, the same customs may be traced through the neighbouring nations. In an erudite dissertation on the Athenian *skiophoria*, Mr. Christie has shewn on good authorities, that agricultural ceremonies, of a mystic kind, were practised in Persia, in China, and in Greece; the Athenians (who obtained the knowledge of them from Phœnicia) celebrating them as “the most ancient record of the art of sowing;” the Persians, at their more ancient festival of Nouroze; and the Chinese, “when the Sun entered the fifteenth degree of Aquarius.”†

Herodotus, Diodorus, and Plutarch, in their histories of those remote ages where fable mingles with fact, open too wide a field for me to presume to follow them here, and follow them far: were I to attempt it, instead of fixing a few facts, I should become desultory:—but among much other matter relating to Osiris, we learn from thence that he is Bacchus also. Herodotus expressly says, “in the Greek language, Osiris is synonymous with Bacchus;”‡ your own “Inquiry,”§ confirms this: and Dr. Prichard supported by classical authorities, adds (what is much to

* “Inquiry into the Symbolical Language of Ancient Art and Mythology,” p. 86. † Christie’s “Dissertations,” &c. pp. 136, 7, 8. ‡ Euterpe, ch. cxliv. § Page 10 of Mr. R. P. Knight’s “Inquiry.”

my purpose) that Bacchus traversed the world leading in his train a host of fauns and satyrs, and other *fabulous* beings, *whose images are seen among the constellations*.^{*}—This latter circumstance, appears somewhat dubiously to imply that, the world which Bacchus traversed, was not the sublunary world, but the celestial *mundus*.

Now, independently of the above, it is natural to expect that a demi-god so celebrated as Bacchus, should appear somewhere on the sphere. There is no planet named after him; and certainly no other constellation accords so well with the accounts, and with the ancient figures, of the bearded Bacchus, as this of Boötes.

Diodorus says moreover of this demi-god, (Bacchus or Osiris) that he taught men to distinguish and cherish good, and to eschew evil; that he held in great esteem those artisans who contrived and fashioned weapons for the destruction of wild beasts, and implements of husbandry; and that he himself taught the arts of tillage, travelled to civilize mankind, and was raised to heaven in gratitude for the great benefits—chiefly mechanical and agricultural—which man had derived from his inventive genius.—All this has unquestionable reference to the earliest and rudest ages; but scarcely less than the bold vivacity and versatile fancy of Volney, would venture to regard the crozier and scourge of Osiris—the generally recognised symbols of attraction and repulsion—with any reference to the dear-bought knowledge of good and evil, of which we read in Genesis.

Throughout these varying, but not utterly discordant, accounts of patriarchs, demi-gods, and kings, the general reader will have borne in mind, that the arts of tillage and of the herdsman, were in those early ages esteemed—and justly esteemed—most honourable and important. The word Boötes, I believe, in the Greek language, designates a herdsman or rustic. Agrotēs, being husbandman or cultivator, is nearly synonymous. To the five Coptic etymons of the name Osiris, which the author of “the Analysis of Egyptian Mythology,” brings forward on the authority of Jablonski, M. Silvestre de Sacy has added another, and I believe Dr. Hager a seventh. If these prove any thing, they prove what Dr. Prichard has remarked in a very sensible note—that, “the names of the Egyptian

^{*} Analysis of the Egyptian Mythology, p. 57.

gods were derived from a dialect already obsolete when the classical authors wrote." The other names or epithets which we have seen assigned to this constellation, may, some of them, have been the proper designations in different countries, of one or more individuals who were honoured among the Sabæans on account of their agricultural talents or discoveries: to whom were rendered sacred the stars whose risings and settings were the signals of agricultural operations.

I ought perhaps to have mentioned before, that, depicted as he is on the oldest of the modern spheres, as if ascending the summit of the Mons Mænalus, our constellation accords precisely with the mention in the ancient oracle cited by Eusebius, of a mountain herdsman bearing a mystic goad. The critical reader may perhaps have noticed an irregular form, like that of a fragment of rock, beneath the foot of our sculptured mountain herdsman, as he presents himself in the etching and on the gem. This I have always supposed to be an accidental fracture: but I cannot be certain that it is not designed; and that it is not the prototype of the Mons Mænalus.

At length the Greeks appear—either in order to avoid the confusion of various denominations; or from their habitual jealousy of *barbarians* and *their sciences**—but most likely from their strong and evident desire to appropriate to themselves as much of the sublime science of astronomy as possible—to have abolished, (where they could, and at some time before the age of Anacreon) the Chaldean, or Æthiopian, and Phœnician designations—in short all the foreign proper names of this astronomical personage; and to have generalized or consolidated the denomination of the asterism in question, as we behold in the word Boötes.

But before this verbal consolidation, an hieroglyphical mode of generalizing—if not the epithet, yet the representation of the asterism, appears—if Kircher may be credited—to have been adopted by the Chartomi of Egypt. What degree of authenticity you may think it right to allow to the Egyptian planispheres produced by this antiquary, I cannot foresee.—

* "The Greeks were not only very indifferent proficients in the sciences," (says Sir William Drummond) "but they were in general extremely ignorant of the oriental languages."—*Memoir on the Antiquity of the Zodiacs*, p. 13.

I have before intimated that I think but little ought to be granted in all cases where antique authorities are not brought forward: yet I must add that I do not suppose Kircher to have invented his planispheres—which would be to pronounce him outright to have been an impostor. No: I rather think they are compilations; and that no authority has been adduced, because from no single authority were they copied. Sir William Drummond says that, “to the accuracy of the planispheres exhibited by Kircher, many objections have been made, but Bailly, (the French astronomer) has certainly repelled the most important of them.”*—*Whatever* weight of authority you may be pleased to allow to them; it is remarkable that in his plate of “the northern constellations,” instead of Boötes, Noah, or Osiris,—the first cultivator of the vine—we behold *the vine itself*!—I introduce the mention of this, not merely as a curious fact; but (to those who place reliance on Athanasius Kircher) as a buttress of unexpected support to the mass of evidence which so many antiquaries have laboured to collect, in order to shew the identity of the very ancient personages who are here in question.

It is difficult to suppose the vine itself to have been constellated in a planisphere where it is the sole vegetable asterism, upon any other principle than as the substitute, and fit symbolical representative, of him who first expressed and fermented its generous juice; and it may have been so substituted (as I believe Kircher says or implies) by the second Hermes; as a mean of reconciliation, or common center of scientific agreement, between those different tribes or nations, who had begun to call this asterism by different names. De Pauw has ascertained that the use of wine came from Æthiopia to Egypt; and Sir William Drummond that, the vine was sacred† to Osiris; facts which I could wish might be remembered when the sequel to the present essay, comes before the notice of the critical reader.

Moreover, there are various rumours (not to say more of them) among the rabbin, of a sacred and constellated vine being known to the Hebrews. A representation of it existed in their temple; and several allusions to it,

* Œdipus Judaicus, p. lix. with a reference to Bailly's Histoire de l'Astronomie, p. 500.

† Memoir on the Antiquity of the Zodiacs of Esné, &c. p. 57.

are to be found among the writings of their prophets. Had Sir William Drummond happened to think of this stellated vine, whilst commenting on the death-bed prediction of the patriarch Jacob, it would have much strengthened his argument, for some of its foliage branches over from the sectorial space above Virgo, to that above Leo, wherein he has placed the ass's head which he calls a paranatellon of Leo, the standard of Judah. This however is merely a passing notice. I shall also slightly mention, with some allusion to our subject;—particularly to the ancient tradition current among the Byblians that the Egyptian Osiris was interred in their country; that there is a place not very far from thence called Boötes-hellah. Whether *Hellah* may mean, or may ever have meant, *sepulchre* in any of the languages which at different periods have prevailed in Syria, I cannot tell; but the place is now—or was, in the time of Maundrell—a Syrian village, and was visited by that truth-telling traveller; who reports a ridiculous superstition prevalent among the Turks, that no person of their religion could possibly live two years in Boötes-hellah.

I shall here quit further investigation of the origin, meaning, and relations, of this asterism, for the present; not without some regret, Sir, that the demands of my subject, have compelled me, in your presence, among the obscure intricacies of Egyptian mythology; yet intending in a subsequent essay, to return to the *stellar phenomena* on which may more safely be rested the issue of the question concerning the identity of Boötes with Osiris.—This is an important problem; but as it has only grown collaterally out of my speculations on the engraved monuments of Chaldaea, it may be deferred without impropriety, in order that my inquiries respecting the remainder of the contents of Captain Lockett's hæmatite, may not be unnecessarily delayed.

Returning to our enlarged developement of the cylinder, and passing onward from Boötes and the Bear, we next arrive at a remarkable figure kneeling on one knee. It admits of little or no question that this is the very same figure with the Hercules Engonasin of the modern sphere. His similar situation and similar attitude, on the sphere and on the cylinder, attest this, I believe I might venture to say beyond dispute: for these

striking resemblances can scarcely be supposed to have happened fortuitously, or without one of these figures originating the other. I mean those resemblances which even a casual observer may perceive to exist, between the attitudes of the figures, and their similar situations to the south-eastward of Boötes; coincidences in my estimation by far too extraordinary for accident to have produced.

Some of the modern sphere-makers indeed—in order as may be supposed, to make this asterism appear more of a Hercules, have placed in his hands two serpents and a branch of the Hesperian fruit: but of these—symbols of the *infant* deity, and of his subsequent Argonautic success—the former being incompatible with what is expressed by the supplicating action and manly age of the figure, may fairly be regarded as a half-witted superinduction. The action rather belongs—if it might be supposed to belong to Hercules at all—to that part of the adventures of this hero, where, wounded and weary in his contest with the Ligures, he falls on his knees to implore the paternal aid of Jupiter.

Of the origin of this as a Sabæan, or oriental, legend and constellation, I believe nothing is known: but it appears ever to have been represented, from the Babylonian ages to the present, invariably in the same manner. Aratus, who deserves the greatest credit for his honest confession of ignorance with regard to this suppliant figure, describes him as follows:

A human figure whelm'd with toil appears:
Yet still with *name uncertain* he remains:
Nor known the labour that he thus sustains:
But since upon his *knees* he seems to fall,
Him ignorant mortals Engonasis call.

And this sincerity on the part of Aratus, is itself a luminous fact; for it implies no less than that Aratus was himself among the ignorant mortals, and consequently that the story of Hercules—who could not have been regarded as a constellation by those nations who worshipped him as the diurnal sun—has been subsequently engrafted on this stock of ignorance. Had the poet known for whom this figure was intended, it is fairly to be presumed that he would have imparted this knowledge. The contrary cannot be supposed; his subject being the explanation of the hea-

venly phenomena; his purpose to please and to honour his country. The ignorance of Aratus, is the implied ignorance of every Greek: and what better species of evidence could we now have in proof that the sphere is not of Grecian origin?—except indeed it be the resurrection of such an antique monument as that which I have here the honour to set before you? The artificial sphere and the cylinder, are like the planet we inhabit and the moon; they receive and reflect light on and from each other, and are here seen in apposition.

It may not be unworthy of remark, that in the Arabian astronomy, this figure is called *Al-Gethi*, which is literally *the kneeler*: Vitruvius also terms this asterism “Him who is called the kneeler;” which argues equal ignorance on the part of the Romans of the age of Vitruvius, with that of the Greeks, and equal candour on the part of the classical Architect, with that of the Poet: and it may further be observed that the description of Vitruvius appears to leave a wide vacant space in that part of the northern heavens, where on the antique monument before us, is seen a majestic figure, of which I shall presently proceed to treat. He says, “The foot of the Kneeler, is supported by the head of the Serpent that is entwined between him and Arctos (otherwise called Septentrio). At a little distance from them is Delphinus. Lyra is placed opposite to the bill of the Swan. The Crown is between the shoulder of the Keeper, and the Kneeler.”—His translator (Newton, from whom I cite) would here correct Vitruvius, by reading *Antinous* instead of Delphinus: but it is clear on reflection, that this would be an anachronism, Antinous having had no existence either in heaven above or on the earth beneath, before the age of Hadrian:* till that time Ganymede must have engaged the stars in question—if they were engaged at all—on the spheres of Greece and Rome.

These stars however are too inconsiderable in magnitude, splendour, and in the space they occupy, to have belonged to the gigantic constellation—(if such we might assume it to be) which appears holding forth the radiating spikated forms on our Babylonian gem. There is, in fact, no

* The Antinous of the Odyssey is out of the question. He can surely never have been raised from hades to heaven.

figure in this quarter of the heavens, that is of sufficient importance, excepting Ophiucus; and I have the evidence of other Chaldean engravings, in proof that Ophiucus—who could never have been represented with arrows, daggers, or maces—cannot be here intended.

The assertion of Vitruvius that “the foot of the Kneeler is supported by the head of the Serpent,” agrees precisely with the description of his situation in “the Phenomena” of Aratus,

“While sublime his awful hands are spread,
Beneath him rolls the Dragon’s horrid head:
And his right foot unmoved, appears to rest
Fixt on the wreathing monster’s burnish’d crest.

From the whole of which, it would appear that this figure of the Engonasin, has merely been turned upside down, in the course of his translation from the siderial hieroglyphics of Chaldea,—through the spheres of Greece and Rome, to those of modern Europe—but is otherwise unaltered.

Even Ptolemy, who lived about a century later than Vitruvius, was equally ignorant of an Hercules being intended in this constellation, and like his predecessor, calls it Engonasin, or Engonasis. Ptolemy appears to have used certain delineated figures of the constellations, which unfortunately have not come down* to us, for he says (l. 7. ch. 5. of his *Almagest*) that, he “does not always make use of the same figures with those before him;” (he had therefore seen some which are lost to us,) “but for the sake of giving his figures a truer proportion, and adapting them better to the situations of the stars, has made many *alterations therein; as the astronomers before his time had done in the constellations of those that were more ancient.*” Upon which memorable passage, Dr. Long pertinently remarks, “this observation will explain to us how it comes to pass that we find a difference amongst ancient authors in their descriptions of the constellations: thus the Bull is drawn according to

* So at least, I believe; but have already spoken with the degree of uncertainty which I feel, of those engraved in the reign of Geo. II. and I have met with none other. My notion is that the words “delineated according to Ptolemy” which are appended to those charts, are intended to express no more than, according to the written descriptions of that astronomer—not according to his delineated planispheres.

Hipparchus and Ptolemy, with only head, neck, and fore-part, as we have him upon our present globes: whereas Vitruvius, Pliny, and others, describe him entire."

Proceeding in the order of our cylinder—between Engonasis and the figure pouring forth water, stands that very remarkable and majestic figure to which I have already alluded, holding eight spikated forms (radiating from his left hand) which appear to be either doubly-barbed* arrows—or perhaps may be sceptres, maces, or daggers, (the reader must on inspection decide for himself whether either, and which, of these are intended) and in his right hand, brandishing above his head a thunderbolt, as if in the act of proceeding to launch it.

Of the engraved contents of this curious gem, this is the only figure concerning which I am at all sceptical; and my doubts are, whether it be a lost asterism—that is to say, the original Chaldean occupant of certain stars in this quarter of the heavens, which are now engaged in other constellations? or a personification of the planet Jupiter? or the anomalous and ill defined Belus of Herodotus, Diodorus, and Macrobius?

I shall beg leave to submit my reasons for this uncertainty, in the hope that they may tend to lead those who are better skilled in the occult mysteries of ancient learning, to some sound conclusion on the subject.

First: there appears in the engraving, an evident—or at least a very plausible, and credible—connexion or relativeness, between the suppliant figure and him who with an air of commanding superiority is wielding the thunderbolt. To speak technically, they are *grouped together* with considerable address on the part of the artist, and in a style which displays no contemptible powers of composition. This is in favour of our regarding the thunder-bearer, as an asterism co-ordinate with the Engonasis.

There is further some relation traceable, between these sculptured figures, and the classic story, whatever be its real origin, of Hercules entreating aid of his father, when engaged in his Ligurean contest: quite

* I have seen doubly-barbed arrows bearing resemblance to these; and they were brought from Africa.

enough, I should imagine, to shew that this Grecian or Barbarian fable is more ancient than the heroic ages, and that it is of astronomical origin; alluding, as I should suspect, to some opportune appearance or configuration with other stars, of the Chaldean planet Jupiter. It is here observable that both Eratosthenes and Hyginus, apply this story to the Engonasis of the sphere: the latter says that Æschylus interpreted this figure to be that of Hercules contending with the Ligures for the cattle of Geryon: but I acknowledge that I can find in this poet no such account of the Engonasin: "The crowds (says Hyginus) increased around him, and the arrows with which he had slain many, became exhausted: wounded, weary, and overpowered by numbers, he threw himself upon his knees and implored the paternal aid of Jupiter; who, taking compassion on his son, caused heaps of large stones to rise around him, with which he renewed the contest and put his adversaries to flight." The present engraving, however, (if it have relation to this story) shews that the weapons—the fabled weapons—with which the father of Hercules in pity supplied him, were not stones.

Notwithstanding this legend of Jupiter and Hercules has been preserved, and may seem to confirm that profound observation of Lord Verulam that many of the ancient fables appear not to be invented, and even not to be understood, by those who have transmitted them to us, yet it is very possible that the Greek mythologists and astronomical philosophers, may have contrived to supersede and banish from their sphere this Chaldean constellation—Beel-*ath*, Beel-*ur*, Beel-*utz*, or whatever else he may have been denominated—thinking it inconsistent; or derogatory, and perhaps impious, that a barbarian deity resembling him whom they venerated as all-pervading, and lord of the whole etherial expanse, should appear as a constellation merely, among the fixed stars.—Or he may, for these reasons, have been converted into a Ganymede, who after maintaining his celestial station for a time, has in his turn been superseded by the minion of Hadrian.

Now Ganymede being the son of Laomedon of Troy, it is very unlikely that he should have had any place among the asterisms of Chaldea. He is too late in time, (although not too remote in place,) to consociate with

Nimrod, Chepheus, and Cushiopeia, whom I propose to myself the honour of introducing to the reader's notice as occupants of the primitive sphere; and it has been already remarked, that the original cup-bearer of Jupiter, was Aquarius—the pourer forth of the waters, either of Tigris and Euphrates—expressed by that *double* line of undulation $\approx$; which is his ordinary symbol; or those of the Nile;* or those of that general deluge, of which we find organic vestiges in every country, and broken traditions among every people of antiquity. Nor is this account unsusceptible of philosophical construction; for where Jupiter was understood to be the expanse above, the pourer forth of the waters below, might by no overstrained analogy, be called his replenisher, or cup-bearer.

But there are other ancient Greek fables which may possibly have been derived from the two Assyrian figures which are here under our notice, or be of the same origin with them. In Sherburn's notes to "the Sphere" of Manilius, he says "Some will have the Engonasis to represent Ixion;" and certainly the wheel to which Ixion was condemned, might with small aid of imagination, be conceived to be derived from the circular radiation in the hand of Jupiter, which so dubiously expresses arrows, sceptres, or spokes; and the thunder-bolt which he brandishes in his right hand, be as easily supposed to be that which drove the presumptuous Thessalian king from the celestial regions.

Sherburn further says that "others will have the kneeling figure to represent Theseus"—but it would too much retard the main-stream of our inquiry, to dwell upon all the various constructions which the Grecian fabulists have put upon this group of stars. At the best that stream must break over a rocky bed; and the reader will determine whether or

* Mr. Payne Knight (see his "Inquiry," 121) states that, "according to Pindar, the most orthodox, perhaps of all the poets, Ganymede was not the son of Laomedon, but a mighty genius or deity who regulated or caused the overflowings of the Nile by the motion of his feet. His being therefore the cup-bearer of Jupiter, means no more than that he was the distributor of the waters between heaven and earth." Mr. Knight has just before observed that "The fable of Ganymede the cup-bearer of Jupiter, seems to have arisen from some symbolical composition, at first misunderstood and afterwards misinterpreted."—But to pursue this chain of reasoning might confound in the reader's imagination the stars of the northern hemisphere which are here in question, with those of Aquarius.

not enough has been said, to imply that perhaps a majestic constellated figure, once engaged a considerable assemblage of stars in this quarter of the Chaldean heavens, whose left hand was surrounded by that circular group which we now term the stars of the Corona Borealis, or Crown of Ariadne.

It will tend but little, I fear, toward setting at rest the question of whether a planet, or a constellation, be intended by this Jupiter-like figure? that his right hand is employed in wielding a thunder-bolt, for so I think the zig-zag or rectangular form which he holds aloft, must be interpreted, although more angularly expressed than that symbolical or diagrammatic thunderbolt, which has become among chemists and astronomers, the conventional sign or character of the planet Jupiter, or than that with which we are presented in the more elaborate sculpture of the classical artists.

To him who may wish for my reasons, I would state that the more natural, as well as more ancient, mode of inscribing this symbol was angular. The meteorological character of the visible part of thunder (if that expression may be allowed) is angular: and thunderbolts are thus angularly expressed, by Salmasius; in the Aldus which I have before mentioned; and in other early typography: and also nearly thus in an antique gem which has been copied—though very badly copied—by Montfaucon, in his supplement.

When the Grecian artists sculptured a thunderbolt, they evidently thought of the description of the poets,—vague and indefinite though Mr. Burke has pronounced it to be—and contrived to render the dire object not less sculpturesque, than the thunder of Homer and Virgil was terrible and poetical. Our Sabæan thunderbolt is far more simple; and might have been thought unique in ancient lithography, but for the gem produced by Montfaucon.

In that gem however, so far as can be judged of from his ill-drawn representation of it, the thunder partakes a little more than in the present, of the character $\mathcal{U}$, which is now used to denote the planet Jupiter, being somewhat curved at that end which is grasped by the Deity. But perhaps I am dwelling too long on this subordinate and accessory thun-

der-bolt; which after all, cannot prove more than that he who wields it is Jupiter: not whether in the Chaldean system, that personage was planet, or constellation, or aught else. Neither does what we read of him in Herodotus, Diodorus, and Pliny, in any degree clear up the obscurity in which this point is involved. The elements of truth, may perhaps be found among them; but they want rarefying and analysing.

The construction of the word *Belus*, is, I believe, neither exactly Chaldean, Cufic, Arabic, nor Hebrew. It must have been originally either a compound, or some other word with a resembling sound, belonging to, what has been termed the original language of the East: which sound, the Greeks modulated (as they did the proper names in general of the barbarians) into ΒΗΛΟΣ, as being more agreeable to a Grecian ear. By most scholars, the radix is allowed to have been Beel, Bel, or Baâl; which is in fact, the same word, varied by the differing dialectic pronunciations of the several Sabæan nations; of which Mede says that *Bel* was the local orthodox pronunciation of Babylon and Chaldea; whilst *Baâl* appears to have been that of the Canaanites and Hebrews.

This word was sometimes employed as a prefix, or prænomen; and at others, as a post, or sub-fix, or cognomen—being equivalent to the *Domini* of the Latin language, and to the word *Lord* in our own. Hence while it was the most usual solar title, it became also the conferred or assumed title of several mortal chiefs of renown; amongst whom might be reckoned, the Itho-bâls, and that Abibaâl, of Tyre, to whom Sanchoiathon is said to have dedicated his Theogony: the Runic Bâl-dur; Hanni-bâl of Carthage; and Eth-baâl, king of the Zidonians—the father of that Jeza-bel, of whose atrocities we read in the first book of Kings.

By their own philosophical, or fabulous, or poetical, or musical, process—whichever the reader pleases—the Greek mythologists appear to have elaborated from this *Lord* or *Chief* of the Sabæan idolatry, both Jupiter and Apollo. The former, as King of Heaven; the latter, as the local deity of the Sun. And this is accounted for without the least circumlocution, and without room for the least suspicion of the sophistries of scholastic refinement, when we recollect—that *the SUN*, and *the KING OF HEAVEN*, were one and the same at Babylon,—but among the Greeks were supposed to be separate existences.

I believe all previous antiquarian writers have dissembled, or passed over, their suspicions—if any suspicions they entertained—concerning him whom the Greeks have called Belus; excepting that learned orientalist Sir William Drummond, who asserts of the barbarian names collectively, as they have been rendered by the Greeks, that in all his reading, he has not met with a single correct rendering of any: yet they appear to have altered Belus, in *sound* far less than some others, for Beel-ath is literally, lord of the sign—that is, the leading zodiacal sign: or according to some Hebraists—when לור is plurally regarded—Lord of the signs of Heaven, would be meant. That Solomon conferred the name of Baâl-ath or Beel-ath, on a city of his dominions, has been already noticed.

But while Herodotus, Pliny, and others, treat of Jupiter-Belus as a deity, Diodorus affirms that the *original* Belus was an emigrant from Egypt. How are these accounts to be reconciled?

I perceive no other so credible mode of reconciling them, as by supposing that a human chief did in the remote depths of time, really arrive with a colony, and did institute and endow an astronomical college, on the banks of Euphrates, and that the name or title which this chief bore or assumed, was Beel-utz, or some such expression: for in unorthographical ages, verbal niceties cannot be supposed to have existed. Abram was of Ur, (of the Chaldees) and Job was of the land of Uz: the lord of either of which places, or of a colony migrating thence, would have borne an appellation sufficiently near to that in question, for the purpose of our argument. He would have been called Beel-ur, or Beel-uz.

Diodorus however is not altogether responsible here, for he only says, this is “what the Egyptians affirm:” now, upon a point in which their national vanity is involved—exceedingly vain of their remote antiquity, as the Egyptians are known to have been,—we are not obliged to believe them without due allowance, more than we are our friends the Greeks. The same Egyptians also informed Diodorus that the most ancient of the *kings* of Egypt was the Sun! Upon this point therefore, he is not unlikely to have been misinformed: his fact may be false, and the seeming fable which he has connected with it, may be the fact,—orientally or meta-

phorically expressed: with this difference, that the chief in question came, not from Egypt, but from the Arabian peninsula; or perhaps (though I say this in conformity with the figurative pedigree which is assigned to this chief by Diodorus) from the African shores of the Red Sea.

If this very ancient chief existed, he was not the son of Nimrod, as some other authors have asserted: it is not reasonable to suppose that the "proud opposer of the will of Jehovah," erected a temple to his own son. It is far more likely that—as stated by Diodorus, he was the son of Neptune and Lybia: that is to say, fabled to be so, because he was born somewhere on the south western shores of the Arabian gulph.

It is not difficult to suppose that the ambition of such a chief, might cause him to be known—as in after-ages the royal *Adads* of Damascus were known—by the appellation of the Sun himself, the great god of the idolatry of his native country. Such assumptions, indeed, have ever been common in the East. We are here on the debateable land between the territories of fable and fact: but in the Hebrew language, which has brought us our best records of these far distant ages, the principal scene of them is called the plain of *Shan-aar*—that is, of the *Sun*—and it appears highly probable, that he who introduced the exotic worship of that luminary, would introduce with it, his exotic name; and would possess the power of so employing it, that, after death, himself should be canonized and constellated as Beel-uz, Bel-on, or whatever else may have been his primitive and correct denomination; notwithstanding that the Sun—the lord or chief of the Sabæan host—was also known and addressed by the lofty appellation Beel, Bel, or Baâl. It appears to me that Chepheus had previously been thus constellated in Æthiopia, and that Nimrod, since changed to Orion, was also thus constellated by the astronomers of Babylon, at about the same era with Belus:—but the constellations of these latter chiefs, will be the subjects of future essays.

Having shewn how there may possibly have been a constellated Belus on those sidereal charts, or chambers, of ancient Babylon which served the purposes for which we now use an astronomical sphere; the consi-

derations which attach to the idea of the majestic figure of our gems being intended for the *planet* Jupiter, are next to be seen.

The first objects of the nocturnal adoration of the Sabæans, were doubtless the fixed stars and the moon. After the five planets also—"wanderers," or "interpreters," as they were variously termed of old—came to be recognised and known; however imperfectly the courses of those planets may at first have been observed by the Chaldeans—names must have been conferred on them; and in their sacred representations, graven images, or personifications, of these erratic and mysterious interpreters, their figures must have been characteristically discriminated, to the best of such powers of art as were then known and exercised. This, according to Maimonides, Kissæus, and the Talmudists, supported by the simple but remarkable fact of the ancient division of time into periods of seven days each, *named after the planets*—must have been from an era exceedingly remote. How much earlier than the courtship of the patriarch Jacob—in the history of which, we find the first scriptural mention of weeks—cannot now be known.

But whenever the time, and whatever may have been the Chaldean* name of the refulgent star which we call Jupiter, it would not be easy, among those antiques of Babylon, Canaan, or Æthiopia, with which we are yet acquainted, to point out a *figure* which could compete with the present for the honour of being regarded as the representative of his angel, or presiding spiritual intelligence.

To this internal graphic evidence, may be added the impressive fact—for so I deem it, both on this particular occasion and with reference to my general system of explication—that, *among these cylindrical gems, I have not yet met with a single instance where all the seven planets are absent*. In fact, without one or more of these, what would be the sculptured asterisms but so many celestial consonants?

Now, on the gem before us, the commanding personage who is here under our notice, is the only figure that by possibility of critical construc-

* I believe it was *Mazal-tob*: the final syllable of which is Æthiopian, and means *king*. *Mazal* is *star*. I suppose, as *Mazal-oth* are stars of signs; *Mazal-tob*, is king of stars.

tion, can be supposed to be intended as a personified *planet*: Boötes; the Bear; Engonasin, and Aquarius—of which we are here presented with the primitive representations—having survived the ravages of time and the wrecks of empires, as Sabæan *constellations*. This may be deemed a strong argument.

There is however, an authority of somewhat later date than Diodorus, to whom, notwithstanding his occasional vagueness and uncertainty, too much respect is due for him to be passed without especial notice, supported as he is by some of the more ancient traditions:—Macrobius, treats of the Jupiter of Heliopolis, or Baal-bec, (originally, I believe, an *Assyrian* idol,) of whom he says,* “That this Jupiter is the same with the Sun, appears as well by the religious rites with which he is worshipped, as by the fashion of the image. The right-hand is lifted up, holding a whip; the left holds a thunderbolt and some ears of corn; all of which denote the consociate powers of Jupiter and the Sun.”

It must be acknowledged that great indistinctness, and even confusion, exists between the attributes of the gentile deities, wherever the light of revelation, or that of astronomic science, has not glanced. Every student must have experienced this, who had occasion for a critical examination and comparison of those authorities which classical scholars are taught to respect. As the Sun appears on others of these antiques, in no questionable shape, being sculptured orbicularly: and as it is now become so desirable for the interests of learning, to clear up the obscurity, to disentangle the confusion, and to reconcile, where it may be possible, the contradictions, which I have regretted above; I was, and am, far from wishing to increase the motives for scepticism, by introducing to the public an engraved personification and a spherical representation also, of the solar luminary, both dug from the ruins of the same Babylon, and without any efficient chronological clue by which to discover *how* widely apart from each other, the execution of these works may have been in point of time. But, to dissemble or suppress the doubts that here occur to me, because I cannot dispel them; would be still less commendable, because less candid

* In Saturnalia, lib. i. as rendered by Stanley.

and characteristic, from one who has already spoken with some favour of the belief that is founded on reasonable doubt.

The system of poetical personification, and the settled ordination of the mysterious rites of the popular symbolical deities, are allowed, in the necessary and actual progress of the human mind, to have been preceded by star worship. Authority for this I have already exhibited. *In the course of the transition* (for the change was not sudden) from the latter to the former, were produced those multiform and many named deities, of which Zeus-Belus (otherwise Jupiter-Belus,) is one.—The Sun was, in the primitive superstition, King, Lord, or Ruler, of the diurnal heaven: In some countries, the planet Jupiter gradually became so of the nocturnal heaven; being the most refulgent of its stars: and at a later period, was venerated Jove the thunderer; the supreme deity of the symbolical ages: the poetical and popular ruler of the upper regions of air.

Hence, we find him invoked with great sublimity by Aratus, as the supreme and omnipotent *Sire*—the wonder and the bliss of man! Hence Homer, Herodotus, and Diodorus, speak of him as king of heaven and chief of the polytheistic pantheon of Olympian deities: but to the retrospections of Macrobius, and it would seem, to the existing theology of the author of the Orphic hymns, he must have been seen as it were in transit; or felt as a scarcely coherent mixture, borne up, and kept aloft by a dense spirit of superstitious devotion, which presumed not to attempt discrimination, and to which dark and indefinite dilatation, was awful mystery.

Hence too Dr. Prichard in his recent and able “Analysis of the Orphic Fables,” states that “the title of Zeus, or Jupiter, which we have seen appropriated to the universal deity in these poems, is applied in other fragments to the god of the solar orb.” Among the proofs of this, he cites the following invocation from Macrobius, which appears to have reference to the statue which I have mentioned above as having been seen by that writer at Baal-bec.

“O thou, who whirlest thy radiant globe, rolling on celestial wheels through the spacious vortex of Heaven! Glorious Jupiter!”

——“thou Sun! who art the genial parent of nature.” He further

addresses the same deity, as being also "Dionusos,* and father of the sea and land!"—But such rhapsodical inconsistency who shall profess thoroughly to comprehend or to understand?

Yet, as Dr. Johnson writes that "inconsistencies as applied to human productions, (and the various systems of ancient mythology are no other) may both be true," I have (I confess,) added a fresh instance to the already abundant stock of the vanity of human wishes, by desiring to discover and reveal, whether, how far, at what time, and by what course of transition, the Grecian Jupiter, has, or has not, been generated between the supposed astral effluence of the planet Jupiter, and the attributes of the vernal Sun.

The Baal, or Beel—the acknowledged *lord* of the Babylonian heavens, was the Sun. The lord of the heavens of those Greeks through whose writers we derive our acquaintance with Jupiter-Belus, and who made a point of finding their own deities in every country, was Zeus, or Jupiter. Hence, among other mistakes, or wilful perversions from a patriotic motive, may have been generated Jupiter Belus. At the same time we must allow it to be far within possibility, that a memorable conjunction of the Sun and the planet Jupiter, ill understood by the Greeks, or purposely misrepresented, or mystified by the Babylonians, may have suggested this conjunctive epithet, while it gave birth to the majestic figure which is here the main subject of inquiry. I shall eventually submit a computation resting on this hypothesis.

Of the resemblance between this figure and the description of that seen by Macrobius at Baal-bee, the reader must judge for himself. Proof submitted to the eyes, is perhaps of all species of evidence, the least likely to be affected by what others may say. By the emblems or symbols which were held by the Heliopolitan statue, "denoting the consociate powers of Jupiter and the Sun," Macrobius (a pagan of the age of Constantine) must have meant,—if any definite meaning existed in his mind—that the thunderbolt was the symbolical sceptre of the regions of Jupiter or upper air; and the whip, that which was fabled to urge the diurnal course of the Sun "rolling on celestial wheels." Ears of corn

* How this notion of the Sun being also Dionusos or Bacchus, came to obtain, will be explained in my next essay, on the sign Boötes or Osiris.

are not immediately significative of either: and Macrobius, upon the same symbolical system of principles might, with better reason perhaps, have consociated Ceres also, of whom corn has ever been esteemed the gift and the emblematical representative: but it is possible that if we had the Heliopolitan figure before us, we might discover arrows—the symbol of the Sun's rays according to the poetry of Homer; of hail according to that of Æschylus—in what appeared to Macrobius to be ears of corn.

That the leading doctrines of the judicial astrology of the Chaldeans, are essentially the same with those which have descended through Berossus and Ptolemy to its modern adepts, will gradually be developed as we proceed, and according to these, by the *consociate* powers of Jupiter and the Sun, we can properly understand nothing but the temporary appearance of those planets in some powerful and auspicious configuration; and, most likely, their conjunction; that is, their presence in the same zodiacal sign or mansion.

Their conjunction, (which would have been memorably auspicious to the native of the present horoscope)—either in the sign Leo, which is the proper astrological domicile, or house of the Sun; or in that of Sagittarius, which is the mansion of Jupiter, may doubtless have been the subject of a Sabæan statue or hieroglyph: but then, (as the astronomical reader might justly remark) to have been permanently intelligible, the same mystic combination should have presented also some allusion to Leo or to Sagittarius: and in either event, such a temporary conjunction probably of not more than a few weeks duration, could not satisfactorily claim possession of the mass—or rather brood—of those ideas of Jupiter Belus, which have been generated by the Grecian mythologists.

The latter part of this argument is granted: but we are not called upon to account for this Grecian brood; which may be spurious. And concerning the former part—namely that the engraving or the statue, should have presented some allusion to the *place* of the conjunction, had a conjunction of these planets been intended to be expressed—I shall presently return to it.

Amid these uncertainties, the reader's powers of attention shall be respected; and that portion which I cannot honestly meet and usefully en-

gage, I will not endeavour to dissipate in numerous and petty researches. I shall trouble him with little more with regard to the present figure.—The want of the ocular sculptured fact which has been the subject of the comments of Macrobius, is much to be regretted. When the devotees and hierophants formed their statues of *gold*, they condemned their deities to a short lived immortality. Could we behold his Heliopolitan Jupiter, which doubtless was the result of Grecian refinement operating on Sabæan simplicity, it would perhaps appear (as I have already intimated) that what Macrobius has called ears of corn, were in reality intended for arrows. The dissimilarity between rudely sculptured arrows, and ears of corn, would not be great: and M. L'Abbé Tressan* asserts—I earnestly wish that he had enabled us to know and criticise his ancient authorities for a fact so pertinent to our present inquiry—that one of the Jupiters was *sculptured* “*with arrows in his hand.*” While I confess that I have nowhere met with either ancient record, or sculptured example, of such a representation of Jupiter—unless the present should be thought such—I must add, that it is not difficult to divine a reason for such a representation, in full accordance with the system of predictive arcana which holds together the antique mysteries of the Sabæan superstition, and at the same time applicable to the monument before us: for as I have already intimated, Sagittarius, or *the archer*, was esteemed to be the proper astrological station of the effluent virtues of this most powerful planet.

In the Asiatic astronomy I can nowhere find that Sagittarius was either denominated, or represented, as a Centaur. On the contrary the terms by which this sign was known to the Arabians, Persians, Chaldeans and Hebrews, all signify arrows, and in the age of Eratosthenes it was represented, as it is still represented on the antique sphere of the Farnesian gallery, by a figure which is at once Archer and Satyr:† Spence adds on the same, Grecian, authority, that he was the very satyr who *assisted Jupiter* so much in his wars against the rebel giants: Aratus, who is believed to have copied his “*Phenomena*” from the sphere of Eu-

* In his work on Heathen Mythology.

† Eratosthenes de Sideribus, Art. 27.

doxus,* calls *Sagittarius* (as this Latin name implies) simply “*the Archer* with his bended bow.”†

It can scarcely be necessary to dwell on the circumstance, (which seems to be mystically connected with the above legend as it reached the ear of Eratosthenes)—viz. that the sign *Sagittarius* has ever been esteemed the proper domicile, or station of power, of the planet Jupiter. Ask a modern astrologer in what part of the zodiac “Jupiter joyeth?” and he will immediately reply, “in *Sagittarius*”—quoting his venerated authorities, if you wish for them, from Ptolemy downward: in short, from hence, Jupiter has been supposed to shed his most potent influence, from the earliest Chaldean dawning of the science, down to its present evening twilight.—We come now to the mathematical part of our argument.

If the reader pleases here to revert to his globe already elevated to the latitude of Babylon, with Fomalhaut just rising above the south-eastern horizon, he will find the brass meridian—where?—He will find it *passing across Sagittarius*; which, when taken with what is above disclosed, forms a linked and luminous chain of sidereal circumstances, that may assist us beyond all book-learning, in assigning the true name and meaning to our majestic and mysterious figure, and in ascertaining the precise state of the material heavens, at the time of birth of the native of the present horoscope.

The planet Jupiter, then, if I rightly interpret, has here attained his meridian altitude, and is posited in his own peculiar mansion of might and dignity, holding forth his arrows; (presuming arrows to have been intended by the artist) brandishing his thunder, and betokening a full tide of heroic virtue and success, to the happy original possessor of the present signet; for his patron planet is here, lord of the sign, lord of the hour, and lord of the geniture.

There are several reasons, and some of them strong ones, for our be-

* The “*Phenomena of Aratus*,” is said to be nothing more than the sphere of Eudoxus put into elegant Greek verse: for it has been observed to have all the same mistakes exactly, with the treatise of Eudoxus.”—*Costard’s Hist. of Astronomy*, p. 120. † From Cicero’s version as rendered by Dr. Franklin.

lieving that the group of stars which are now constellated as the Corona Australis, and which at the hour of the present nativity were on the meridian with Jupiter, are those denoted on our monument by the radiating arrows; and that they have formerly been reckoned in the asterism Sagittarius.—These reasons are—the circularity of their arrangement, (the segment being allowed for); the number of stars originally reckoned in this asterism; the doubt whether *two* crowns so similar as this and the Corona Borealis, would have found places on the primitive sphere; the finding the meridian of the present horoscope passing across these stars; the discovery that neither Aratus, Vitruvius, nor Manilius, have recorded any such constellation as the Corona Australis; and the assertion of Dr. John Hill that “the Greeks seem to have considered the Southern-crown as part of Sagittarius, and not without reason.”

Lucian who—as we have seen—argues the Æthiopian origin of astronomy, says of this most ancient and celebrated of the nations that handle the bow; and the probable inventors of archery itself; that they placed their arrows in their hair, precisely in the manner exhibited on our gem, and as we find the stars of the Corona. The words of Lucian as rendered by his latest translator, Tooke,* are (speaking in general terms of the Æthiopians individually :) “his head serves him for a quiver, being stuck round with arrows, like so many rays.” If then the Æthiopian archers of the earliest ages, marched thus to battle, we may not wonder that radiating arrows—whose analogy with light also, is so strikingly obvious, were readily associated with ideas of military glory. Hence the most ancient crowns were spikated circles, as if intended to represent rays emanating from the head of the wearer; and the head of the Rhodian Apollo so famed for its colossal dimensions, which was thus surrounded, may have been remotely copied from those,—radiant with arrows,—of the ancient heroes who in the remotest depths of time, peopled the southern shores of the Red Sea, and of the Arabian peninsula.†

* Tooke's Lucian, vol. ii. p. 225. † The head-dress of the chief mourner at Otaheite, affords a pertinent example of this species of decoration: and if I am not mistaken, among the savage nations visited by Captain Cook, he met with other people, who in a similar manner place arrows in their hair.

Another branch of the mathematical part of our argument, it may be expected, should bear relation to the *time* when the present engraving was executed. Its precise date, is a point surrounded by too many uncertainties, for me to presume to think of attempting to specify it. I can only offer a few hints, and put an hypothetical case.

According to the explication just concluded, the horoscope is nocturnal, and represents a state of the celestial phenomena which must recur once in the course of every revolution of the planet Jupiter—that is to say,—in about twelve of our years. If on the other hand, a conjunction of the Sun and Jupiter, on the meridian of the Corona Australis, be hieroglyphically expressed, and should the horoscope (according with the Heliopolitan statue which is mentioned by Macrobius) be *diurnal*—the places of the constellations being known by computation—such a conjunction in this part of Sagittarius, does not take place oftener than once in about 1080 years; (as has been computed for me by an eminent adept in astronomical science) and the last time that these planets were thus posited, was in the close of December 1782. They were therefore thus posited in the year of our era 702; again in the year 378 before Christ; and again in the year 1458 before Christ.

Leaving the *latest* of these three eras out of the question: the year 378 was not very long before the invasion by Alexander, of the part of Asia where the present gem was found; and notwithstanding that “the queen of nations” had been stripped of many of her royalties by Cyrus and by Darius, her Sabæan superstition remained: this may therefore be the true date of the cylinder. If the reader should see reason to refer it to a prior revolution of the celestial phenomena; we find that superstition in the year B. C. 1458, riding high in the heavens; near its probable zenith at Babylon; and we find Israel following Moses through the desert, or engaged in dispossessing the Sabæans, of the land of milk and honey. The latest in time of these two eras, appears to me the more probable date, judging from the style, and from the degree of skill and attainment in the practical part of gem-engraving, which is displayed on the cylinder. It will be recollected that this date cannot be far from that of the appearance of the Persian darics.

Of the subject of this monument, a single figure remains, the meaning

of which is so obvious, that, I ran small hazard in pronouncing him by anticipation, to be the constellation Aquarius.

Aquarius as here represented—is a very simple, bearded figure, wrapped from head to foot in the winter robe (as may readily be supposed) of Babylonia, and pouring forth water from his vase on a small globe, or star without rays; which is unquestionably that star of the first magnitude, which the Arabians have called Fomalhaut, and which, retaining its Arabian name, still occupies the very place on the sphere, where the stream from the pitcher, or Situla, of Aquarius, ends at present: this fact, of the fluxion from the vase of the water-bearer ending at Fomalhaut, having undergone not the slightest alteration in descending from the Chaldean ages to the present.

Of allegorical figures, or personifications of the striking and important phenomena of inanimate nature, none can easily be more simple and intelligible than a water-god. It is sufficiently simple and unsophisticated, to have been the very first. It calls upon us but for a single and easy stretch of imagination, and that of the most obvious kind. We have to fancy the fountain sufficiently copious to be ever flowing, and that is all. One of the celestial constellations, at least then, in this view of the subject, appears to be a sculptured metaphor: and notwithstanding what I have written in a preceding page, of the worship of the planets being prior to that of the elements, it may be allowed me to observe, that the worship of symbols, and the constellating of the stars, appear to have been coeval, or nearly so in their origin; the same considerably advanced state of the human understanding and imagination, being necessary to both: and perhaps Sir, I may here be permitted, with due deference, to remark, that notwithstanding what I have cited from your 142nd section, you yourself have entertained doubts, or have thought with me on the whole; for in section 137, you say, “the signs of the zodiac, were taken from the mystic symbols.” The symbolizing principle, I conceive must have been known, or felt in a budding sort of way, when the zodiac was formed. If the zodiacal animals, be emblems, (as you have stated;) the Balance also (if a primitive asterism) is unequivocal in its meaning; and a Water-god in very singleness of interpretation, is a poetical effusion.

In the present instance, it would appear from the *two* streams which flow forth from the same vase, that the Tigris and Euphrates were known or believed to have a common origin, and that at least this asterism of the zodiac is indigenous to Chaldea, and not transplanted, or adopted, from Egypt, Æthiopia, or any other country whatever. I have in a former page, remarked on the high value of sculptured facts, the information they afford when we are fully masters of their meaning, being at once illustrative and immutable. Permit me to avail myself of the opportunity of reimpresing that remark on the public attention. In Egypt one river flows from various sources. Here two rivers proceed from a single source.

The interesting problem, in what country the zodiac was invented? is without any decided solution, from the classical ages to the present. There is indeed a general prevalence of opinion in favour of Egypt, but no certainty: and Mr. Costard's* pre-determination in favour of Greece, has converted an astronomer of science and a writer of some power, into a blind beggar of the question. Envy the barbarians the invention of the sublimest of the sciences.—Greece has done nothing toward clearing up these doubtful pretensions—or perhaps has even done worse: what additional evidence it is now possible to obtain, must be sought for in

* The learning and science of this gentleman are very considerable. I acknowledge with gratitude the great benefit that I have received at his hands: but in his treatise "On the rise of Astronomy among the Ancients" his *avowed purpose* was "to restore to the Greeks the honour of inventing what the world generally supposes them only to have borrowed;" and the ardour with which he has followed this "main design," as he terms it, has evaporated his spirit of research. However praiseworthy in his "History of Astronomy," which I believe is a later performance, he here shuts his eyes to conviction, and becomes—what I have called him in the text.

Thus forewarned, it becomes me to hope that I may not have fallen, and may not fall, into similar error in vindicating, and endeavouring to restore their lost honours to, Babylon and the Chaldean Astronomy. Notwithstanding Mr. Costard writes—with a seeming integrity of faith in the originality of the Greeks,—that "in the time of Eudoxus there might be read in the Heavens the ancient history of their most illustrious families during the poetical ages;" he finds himself obliged in a note, not to repress that "*If Achilles Tatius may be depended upon, other nations had other constellations of their own.*" Of the foundation of this doubt of the veracity of Achilles Tatius, Mr. Costard has not been pleased to inform us.

such monuments as the present: and in the internal evidence of the zodiac itself.

As far as respects this asterism of Aquarius, certainly the Assyrian representation is more *simple* than that of Egypt, and that is *itself an argument*: for the progress of man has been universally from simplicity to refinement. Here *two* streams flow from the same vase, as, according to Strabo, the Euphrates and Tigris, both issue from mount Taurus; Egypt has refined upon this; but still—more honest or more unweeting than Greece—has refined, with especial reference as it would seem, to the Tigris and Euphrates, by placing an urn in either hand of Aquarius in the celebrated zodiacs of Esné and Dendera. We may therefore with some confidence, pronounce the present figure to be the Babylonian Aquarius, and not that of any other country; by which I mean the personified source, and pourer forth, of the annual fertility of Mesopotamia and the circumjacent country: Or—if we regard those very remote ages which preceded the cutting of the Assyrian* canals—the pourer forth of that deluge which was annually consequent to the melting of the snows of Armenia.

In my essays on the very curious cylinders of Mr. Rich and Sir Wm. Rouse Boughton, will be shewn that the Pleiades, Virgilia, or stars of the vernal rains, are in the Chaldean system, denoted by small rayless orbs: observing that Fomalhaut is also thus specified on the present hæmatite, perhaps Sir, you will incline with me to believe that the ancients distinguished their ardent and dry stars, from those of moist effluence, by representing the former with points or rays, and the latter as little balls, without rays. On the more ancient of these Babylonian

* In Forster's learned geographical dissertation on the Anabasis of Xenophon, he writes "In marching through the country of Babylon, they came to the canals which were cut between the Tigris and Euphrates, in order, as most authors agree, to circulate the waters of the latter, which would otherwise drown all the adjacent country when the snows melt upon the Armenian mountains. Xenophon says these canals fall out of the Tigris into the Euphrates; whereas Strabo and Pliny say the contrary.—Our modern travellers inform us that the country between these two rivers, is in these parts rich low land something like the province of Holland: so that it is more than probable that these canals were cut to circulate the waters of the one river as much as the other."

gems, where the solar orb appears, it is always radiant, but the moon is always without rays: and in the present instance, while the star which terminates the streams from the vase of Aquarius, is without rays, a star at the other extremity of the gem, which I have interpreted to be Arcturus, or with more probability the ancient Pole-star, has eight distinct rays or small points.

My chief solicitude throughout these essays, being the ascertainment of ancient truths, and to acquire and exercise the means of bringing them to a focus; I can have no objection, but the contrary, to allow those truths to emanate, or throw forth their light divergently: Wherefore, those scholars who would trace all stellar information, and all ancient mythological opinion, up to the book of Genesis as to their fountain head—no further, and in no other direction,—will be extremely welcome to suppose, as they may with a degree of probability not for me to contravene, that the ænigma of this ancient Babylonian group, speaking of it collectively—is to be successfully solved only by reference to the cosmogony of the Pentateuch.

From what has been advanced, it is clear that we cannot look with any rational hope of satisfactory explication, to the legends of Greece, or Rome, and scarcely with more to those of Egypt, unless they had been *proved*—which they have not—to have originated in a common source with those of Assyria.* It is not less clear, that we should look—if we could find them—to the history and the legends of Chaldea, whose more ancient public records have been at two several periods destroyed by the ambitious pride, or foolish vanity, of her ancient kings; and those of subsequent date by her Mohammedan conquerors.

An account of the great deluge of Noah or Xixuthrus, is however among the preserved fragments of Berosus, as well as among our own

* Sir William Drummond will excuse the retention of a sentence which was written before his learned dissertation on the Zodiacs of Esné and Dendera reached my hands. I shall find another opportunity of offering my sentiments of his hypothesis concerning the original formation of the Zodiac, with which mine respecting Aquarius is by no means incompatible.

sacred records; and if we can believe—as we easily may—that the memory of any terrestrial event, would be astronomically perpetuated, by a people who believed themselves taught from Heaven that the stars were for signs—that is to say, if we can suppose that in an unlettered age, such earthly occurrences would be traditionally enregistered in the celestial regions, or so connected with the fixed stars, that when the posterity of the early post-diluvians looked up at those stars, they might be instructed to associate ideas of past events with their splendid re-appearances—surely the important advent of the miraculous preservation of mankind, would not be overlooked, or forgotten.

Hence, whether we regard the figure with the thunderbolt and arrows, as a personified conjunction of Jupiter with the Sun, or as an ancient but dispossessed asterism of the sphere, we may perhaps behold in him and in Aquarius, the pourer forth, and drier up, of the waters of the Deluge, and probably the subsequent origin of some of those legends of Jupiter and Typhœus, which have embellished the poetry of Orpheus and of Hesiod.

In support of this hypothesis, we may observe: first, That the waters from the vase of Aquarius fall upon a small sphere. Secondly—That the majestic figure,

“Jehovah, Jove, or Lord,”

as he holds both arrows and thunderbolt, may be thought to express symbolically, the power both of the *sun* and *air* in drying up those waters; for arrows have ever been held to be symbolical of the rays of the Sun: and, of the prince of the powers of the air, the thunderbolt may well be received as an appropriate emblem:—here then we have Jupiter in his principal Grecian character. Thirdly, The kneeling figure, is sufficiently expressive of that of Typhœus (or Typhon) the dæmon of the deluge; as he, with reference to the supreme Zeus or Jupiter, is characterised in the Theogony of Hesiod. I have the honour to be—Sir, very respectfully, &c.



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ESSAY VI. TO THE RT. HON. THE EARL OF MACCLESFIELD, F.R.S. &c.&c.

MY LORD.—Your Lordship has hereditary claims on the gratitude of Astronomy, and personal claims on mine. I have therefore done myself the honour of addressing the present Essay to the grandson of that Earl of Macclesfield, who—himself a considerable adept in astronomical science—was the great patron of the astronomers of his age and country; and who so worthily filled the chair of the Royal Society.

Its subject is a discovery which it was my good fortune to achieve in the course of certain investigations into the meaning of a very curious Chaldean monument, which was disinterred at Babylon and brought to England by my friend Captain Abraham Lockett; and as it tends more perhaps than any circumstance that has yet transpired, to connect the ancient mythological fables of Greece and Egypt, with the more ancient mystic rites of the Sabæans; while by exhibiting them in an unclouded transit, it elucidates both, I flatter myself that it may not prove unworthy of the favourable attention of your Lordship.

Whilst engaged in those investigations, I assumed, and entertained for a while, the mistaken supposition, that the signet which is the subject of the preceding essay, might allude to the successive departures, at Sunrise or at Sun-set, and in the latitude of Babylon, of the stars of Boötes and Ursa Major; which gave me occasion to institute certain astronomical examinations and comparisons, in the course of which the discovery was made.

Should any of my readers, arriving at this acknowledgment on my part, think it desirable that I should here have set before them and before your Lordship, the short results of my thinking, rather than the progress—and what may possibly be termed the wanderings—of my thoughts, concerning these Sabæan cylinders; and that I should have suppressed what I confess to have proceeded from a mistaken hypothesis; may I be permitted to state that I *have* suppressed all that I did not feel or think would be conducive to truth and perspicuity: all that did not appear to me to tend (in the language of Verstegan) to the “restitution of decayed intelligence.” And if I did in this instance set out upon a wrong scent, I shall probably be allowed to pursue the noble game which I started.

But, beside that I distrust my own qualifications for the kind of inductive abstraction which I here contemplate; it has been, and still is, a problem with me, whether in the present scanty state of our knowledge of Chaldean sculptures—of which De Pauw believed that not a single one had descended to modern times*—it be not wiser to place the few

* “In no country do we find Chaldean statues or monuments.”—*Thomson’s translation of De Pauw’s Philosophical Dissertations on the Egyptians and Chinese.*

facts we have yet attained, or may at present find attainable, in the various lights of which they may be found susceptible, so as to possess ourselves as fully as possible of their true and particular meaning—and even to hazard the reproach of prolixity in so doing—than to attempt the sort of brief concentration of evidence, which may be drawn from coins or such other antique monuments, as are abundant in their numbers, and of which Mr. Payne Knight's "Inquiry into the Symbolical Language of Ancient Art and Mythology," affords an example so excellent in point of style, taste, and arrangement. Nor can I omit to recollect here the learning and science which are displayed by Sir William Drummond, in his "Memoir on the Zodiacs of Esné and Dendera," and other highly valued productions. If my dark gems may be placed in the focus of researches thus perseveringly and effectively carried on;—if I can surround them by discoveries thus wisely promulgated, and they may hence be permitted to absorb light,—I think I can venture to promise your Lordship, that they will be found capable of emitting it in their turn, like the emerald of the Tyrian Hercules.*

I shall therefore not withhold myself from the pleasure of submitting to your Lordship, the following observations, chiefly sidereal,—which while they may serve to correct or confirm some of the details of my earlier remarks on the constellated Husbandman now called Boötes, and to illustrate the ancient mystic legend of Isis and Osiris, which has been so variously yet so vaguely understood and interpreted, cannot fail to impress my general argument of the astronomical character and antiquarian importance, of these curious hæmatite, carnelian, and chalcedony engravings.

I shall in the first place, endeavour to shew more clearly than I have hitherto shewn, how I conceive it to have happened that Adonis, or Osiris, or Bacchus, or Sabazius—for by the latter name also, I find this sub-deity sometimes mentioned even at Athens—was at first *mistaken* for

* "I made a voyage to Tyre in Phœnicia, where is a temple of Hercules held in great veneration. Among the various offerings which enriched and adorned it, I saw two pillars; the one was of the purest gold; the other of emerald which in the night diffused an extraordinary splendour."—*Beloe's Herodotus*, Euterpe, ch. xlv.

the Sun. Should I succeed in this, your Lordship will easily apprehend why the mistake—being handed without critical examination from age to age and from writer to writer—has continued for so many centuries. I shall afterward describe and exhibit some astronomical phenomena and computations, with due references to the outline at the head of the present Essay,—which may perhaps be allowed to throw new light, at once on the mystic rites of the ancient festivals of Adonosiris, Bacchus, or *Sabazius*; on those of the religious initiations of antiquity; and on the interesting gem of which an enlarged developement appears at the head of the paper which precedes the present.

It will here be obvious to your Lordship that, our chief purposes being to identify an ancient constellation, and to ascertain a place corresponding in latitude to the phenomena of the annual transits of that constellation; it would be useless—though not without examples of some authority among men of letters—to accumulate words, by adding another name to those of the Æthiopian and Egyptian demi-god, unless it brought fresh light to bear on questionable facts, or to illustrate truth; nor have I without prospect of such light, introduced that of *Sabazius*.

Both Aristophanes and Cicero, treat of the sub-deity Bacchus, under the name of *Sabazius*, or *Saba-Zeus*, which being literally the God of Saba, points, with our astronomy and our venerated authorities, directly to Saba,* as the place of his origin; either the Saba eastward of the Arabian gulph, or that lately sought for by Messrs. Waddington and Hanbury, of which Herodotus writes, that only Jupiter and Bacchus are there worshipped; which I should construe to mean that *the King of Heaven* (the Sun) was the diurnal and the chief object of their adoration; and the constellated Husbandman, their local and peculiar, nocturnal sign. That every Sabæan people had their peculiar, or tutelary, constellation, or nocturnal sign, is shewn further on in the present volume, and will be repeatedly illustrated.

A passage of the Abbé Banier, combines the results of the learned enquiries of Strabo and Vossius on these interesting points. “As for the

* There was also a Saba-chus, an Æthiopian monarch and conqueror, who over-ran Egypt, Bac-Chus and Saba-Zeus, were the same, either constellated, or mortal, individual: Saba-Chus might either boast of the same mythological descent, or was in fact, of the same family.

Sun, it is certain that they (the Æthiopians) adored him so highly as to repute those to be Atheists who did not acknowledge him for a God, as has been now said, after Strabo. And because he was their great divinity, the Greeks and Romans gave him the name of Æthiopian Jupiter; and that, with so much the more reason, (remarks the learned Vossius) that in all the East and among the nations of Afric, Jupiter not only represented Heaven, but also the Sun."

I ought perhaps to have cited these authorities when I treated of the identity of the Solar God of the Sabæans, and the Grecian Jupiter, in the essay which I have done myself the honour of addressing to Mr. Payne Knight: but the truth is, they were not in my mind at the time. In his next page the author proceeds, "This in short, is all that we know from the ancients, of the religion of the Æthiopians: nay we *are not able exactly to determine what Æthiopians they mean; and in all probability it was the Orientals*, and not those of Afric. And indeed, what Theophrastus tells of the care which *the Sabæans, an Arabian nation*, had to gather incense and cinnamon to offer it to the Sun, is the same with what Strabo says of the *Æthiopians*."*

This is a valuable passage; and Banier's preceding chapter has informed us on "the testimony of Arabian authors," collected by M. Fourmont, that "the Idolatry of the Arabians is older than the Deluge:" and on that of Strabo "that they made a daily offering of incense to the Sun or to Dionysius," and that "the Sabæans carefully collected myrrh and incense, to offer it in the temple of that God."

By the words "that God," I understand here the solar deity; and I think in the preceding sentence, instead of "*or to Dionysius*," we should read, *and to Dionysius*. The meaning appears to me to be, that they burnt incense every *day* to the Sun, and at *night* to the Dionysian stars; for the rites of Dionysius, or Sabazeus, were nocturnal.

As the two Sabas in question—namely, that to the Eastward, and that to the Westward, of the Arabian gulph, to the best of our geographical knowledge, were nearly under the same parallel of latitude, it might be difficult—perhaps impracticable—for astronomy to distinguish between them, where history has not; but, from one or the other of these ancient

* Banier's "Mythology and Fables of the Ancients explained from History," vol. i. ch. ix.

cities, I trust it will eventually appear, that the rites of the constellated Husbandman; otherwise termed the Bacchic, Sabazean, or Osirian mysteries, originally came, to Egypt; to Phœnicia; and subsequently to Greece.

Some little confusion must be allowed to exist in the record of Herodotus, as to the channel by which these rites flowed into Greece* from the fountain head, but this is of no consequence to my argument. The mysteries were introduced by Melampus, either directly from Egypt, or through Phœnicia, and by means of Cadmus and his Tyrian companions.

The comic poet of Athens, and the orator of Rome, contribute their valuable testimony to the same purport—carrying our retrospections to a somewhat more remote era, and perhaps more decidedly to Arabia. They not only confer on this sub-deity, the name or title of Sabazeus, but state in effect that, during the age of the former, the learned of Athens believed Bacchus and his rites to be of Asiatic origin; which is to say that they proceeded at first from the Oriental Æthiopia.

Had not these things been so, and had not Sabazius been known at Athens as a name or title of Bacchus, a critic and a wit so justly celebrated for the accuracy of his notices, as Aristophanes, would not in his comedies, have repeatedly mentioned the deified Husbandman, or God of Wine, under his Sabæan designation:† nor would Tully in another age

* The reader will easily discover the inadvertency on the part of Herodotus to which I here allude (if Mr. Beloe's translation be faithful) by comparing the middle with the conclusion of ch. xlix. in Euterpe. In the former place, the wise and learned diviner, Melampus, is stated to have been "Instructed by the Egyptians in various ceremonies, and particularly in those which relate to Bacchus. With some few trifling changes, he brought them into Greece:" but in the close of the Chapter, we meet with, "I rather think that Melampus learned all those particulars which relate to the worship of Bacchus, from Cadmus and his Tyrian companions, when they came from Phœnicia."

† "ΣΑΒΑΖΙΟΣ is one of the names used for Bacchus, as we see it in the comedies of Aristophanes. In the beginning of his Vespæ, we meet with "*a drowsiness from Sabazius possesses me.*" The above is a note to Franklin's translation of Cicero's book on the nature of the Gods, p. 229. Now, before a dramatic writer would venture to introduce on the public stage and before an Athenian audience, a character who felt or fancied himself sleepy from wine, using such an expression, its meaning must have been well understood. In another of the comedies of Aristophanes; of which Cicero (*de Leg.*) has preserved a fragment, Sabazius is sarcastically mentioned as a deity who deserved to be banished, and whose rites were *nocturnal*.

of classical literature, have alluded to the Sabazean rites instituted in honour of him whom he terms the third Bacchus, and the son of Caprius.* The third Bacchus, when nearly inspected, will probably be found to be identical with the other sub-deities who bore this popular name; for the second was the reputed son of *Nilus* and was educated at Nyssa in Arabia-felix; and, of the mystic meaning of the son of Semele, I shall treat hereafter, in a manner that will fully harmonise with the present constructions.

That the Sun was,—under the supreme Providence,—the real cause of the festivals which were celebrated by the different star-worshipping nations of antiquity, under the names of Osiris, Bacchus, Adonis, and Sabazius, has been already intimated. The concomitant Signs of those festivals, were the risings and settings of the stars of the Husbandman, Bear-driver, or Hunter. Hence, these astronomical occurrences, become pertinent instances of the prevailing influence of certain erroneous doctrines which are pointed at in those observations on mystic signs which are contained in my second Letter (addressed to Captain Lockett).—I have therein endeavoured to shew that the Sabæans from a very early period, fell into the error of mistaking, and venerating, concomitancy, instead of causation. Osiris was not the Sun: but his stars were, among the hierophants, the established nocturnal indexes, or signs, of the sun's places in the ecliptic at different seasons of the year; and the Sun's annual arrival at certain important points, or stations in the ecliptic, were the reasons of the institution of those successive rites, of which the stars of Osiris, or Boötes, were the appointed nocturnal signs; and here we should bear in mind that, none of the stars being visible at the same time with the Sun, his actual place in the zodiac at any given time, could only have been known to the Sabæan astronomers by their observations of the stars: nor can we suppose that, with their more limited means—they were any thing like so adroit and so exact in computing from those points, as our modern professors.—Now, every Solar festival, or sacred observance, (of which there were many among the Sabæans in the course of the year,)—being a feast in honour of the Sun; the easiest and most ob-

* Of Caprius I have not elsewhere read, and suspect that in this place we should read Chepheus, the Æthiopian king—but this is surmise.

vious mode of distinguishing these Solar festivals from each other, and the agricultural festivals from the rest, was found to be, to call the latter, the celebrations of the *Aphanism*—or disappearance; the *Zetesis*, or search, and so forth—of Osiris, or Adonis: so they were respectively termed in Greece, with reference to Egypt and Phœnicia. In other places they were known by other epithets (having probably synonymous meanings in the foreign languages respectively) some of which have been here repeated.

They were termed festivals of the *disappearance*, *search*, and *resuscitation* or *discovery*—of what? Of *productive Causation*, in fact; of which the Sun was the prime agent; and believed by the Sabæans to be the sole cause: the whole forming a physical Allegory, dependent on the seasons, of which the Stars were the accredited signs.

Hence, the transition from Osiris to the Sun, and the mistake of calling the greater luminary by the name of Osiris; was easy and natural. A mistake of the very same kind, which has already been slightly noticed in Essay III, prevails through Christendom at this day. We call the feast of Easter, after the name of the Syrian goddess *Æstarte*, (sometimes written *Æsterth*,) or the Moon; *E*Aster, is no other than *A*Ester: and we so call it because the Moon, has ever been, and still is, the *Sign* of this feast: but it is nevertheless a Christian festival,—having been so to all intents and purposes, since that Moon which rose over the mount of Olives, and threw its pale and trembling light on the sufferings of the Saviour.

With the view of recalling ideas that are here wanted, I may be permitted to repeat, that, some parts of the legend of Osiris, read as if they were to be understood of the mortal chief to whom mankind were indebted for the first rudiments of Husbandry. The place of the Sun at any given time—even the diurnal place—being only known to the ancients by the heliacal and acronical risings and settings of the Stars, it is fairly inferable that Osiris—so to call him, while I suppose him to have been a mortal chieftain—must have taught them to regulate their agricultural operations by the ascension and departure of the principal stars of that cluster or constellated group, which is here under our observation: which Stars, after his death, were very naturally, and as a just tribute of respect, consecrated to his fame, and called by a word which, by

reminding men of important benefits of annual recurrence,—enshrined his memory in popular gratitude; but which, having descended thro' various languages and dialects at a time when language was merely vocal, has become so many various proper names, or epithets, which like other proper terms, have been gradually and partially detached, in a great degree, from the first reasons and motives of their imposition. Hence, while some parts of the legend read as if they were to be understood of an agricultural chief or instructor, of the earliest ages, others seem as if they were to be understood astronomically and predictively; nor do I at present, perceive any other way than this, of reconciling, or incorporating, or accounting for, these two sets of ideas; which may not have been kept very distinctly separate by the ancient mystics: for it is of the essence of mystery to enwrap itself.

Mr. Payne Knight thinks that Star-worship preceded the worship of Symbols.* I think so too: because the former is more simple, the latter more complex and refined. Adoration of the Stars,—brilliant in their appearance; immense in their distance; infinite in their number; and constant in their courses,—appears, where revelation did not present itself, to have been the first religious movement of the human mind: and so natural to man, and to the better part too, of his faculties, that it might be “accounted unto him for righteousness.”

But the adoration of Symbols began very soon afterward, and began among the oriental or Sabæan nations: though it did not attain any thing like philosophical consistency, or poetic beauty, until it was introduced into Greece. This first religious emotion, which my friend Westmacott the Academician has beautifully allegorised in his *relievo* series of the progress of Liberty,† by an Infant worshipping a Star—was, I conceive, very soon succeeded by an endeavour, if not to enumerate, yet to constellate‡ and specify the principal, of those stars, which at first had ap-

* “The primitive religion of the Greeks, like that of all other nations not enlightened by Revelation, appears to have been elementary; and to have consisted in an indistinct worship of the Sun, the Moon, the Stars, &c.”—*R. P. Knight's Inquiry into the Symbolical Language, &c.* Ch. 2. And in Ch. 142.—“the ancient planetary worship preceded the symbolical.”

† Executed for his Grace the Duke of Bedford.

‡ “The most ancient idolaters are with great probability thought to have received the name

peared an irregular and countless host, but were afterward observed to be finite in number, and regular in their periods of departure and return.

And this, as I conceive, was the commencement, or root, from which sprang the worship of symbols: for the periodical ascension and departure of certain stars, or groups of stars, having been remarked to be the invariable forerunners, and others the never failing concomitants, of the annual changes of the seasons, were very naturally associated with,—and became the memorable and acceptable signals of—agricultural, marine, and other operations connected with the business of life.—We must bear in mind, that there then existed no widely circulating almanacks, calendars, or other artificial means, such as science has since provided, of assisting the husbandman and navigator in their various labours. The Stars therefore became most welcome signals; and those who pointed out their unerring courses, and formed those highly useful associations with “*works and days*,”* became the honoured interpreters of the secrets of Nature, or of the will of Heaven.

For these reasons, the periodical returns of the Stars, were to the initiated, yet more than to the vulgar, Celestial oracles, announcing the important approach of those changes, upon which the prosperity—not to say the existence—of man, must ever depend; and under such a dispensation, must for centuries have been regarded as unvarying and immutable truths: for, centuries must elapse, and an art of hieroglyphical record must have been discovered and for centuries have been reduced to practice, ere it could possibly be known,—even to the antediluvians, whose longevity might enable them to notice, what art and science have since conferred on us the power of recording; namely,—that the return of certain stars, as connected with their concomitant seasons of Spring and Harvest, were *not* eternal and immutable, but were subject to a very gradual change, resulting from that apparent movement of the stars in longitude, which has been termed the precession of the Equinoxes:

of Zabii (Sabæans) from worshipping the host of heaven: this they could hardly do without dividing the stars into parcels, as we find their aptest scholars in Idolatry, the Egyptians, did.”—*Dr. Long supported by Maimonides, Hyde, and other venerated authorities. Astron. Ch. 2. vol. i. p. 179.*

* The title of the chief of the poems of Hesiod, which consists of such associations.

Only the more ancient patriarchs and their contemporaries—the men who lived for centuries—could have observed this ; and alarming to the devotees of the Sabæan religion must that discovery have been ; and very cautious must the astronomical priesthood have been of promulgating,—if they ever promulgated,—a doctrine so pregnant with the hazards of innovation to their long-established dogmata.

Hence the most ancient Astronomical geniuses—those who arranged the stars into groups, and who assimilated those groups with the changes which periodically took place in the terrestrial world—possessing the power, would very naturally entertain the will, to avail themselves of an opportunity so tempting, and would not fail thus brilliantly to eternise, themselves, their patrons, and benefactors.

And hence, the oldest of the Sabæan constellations, are, an Astronomical Priest ; a King ; a Queen ; a Husbandman ; and a Warrior.*

It is interesting to know that these—which constituted the *Castes*, or classes, into which society itself was divided among the Oriental nations, and quite in the remotest depths of time—not only remain on the sphere to the present day, and are still traceable through their Grecian disguises ; but are of more frequent recurrence on the Sabæan cylinders than any other constellations whatever—as will appear in the course of these researches.

The King, of whom I shall say more when I have the honour of introducing his antique representation to public notice—was Chepheus of Æthiopia, the great friend, patron, and reputed founder, of the Astronomical priesthood : The Queen presents herself on the opal cylinder of Sir William Boughton, of which I shall treat further on in the present volume : The Husbandman, was Osiris, Bacchus, Sabazius, Noah, or Boötes, the bearer of the pastoral staff, and van, or winnowing implement—whose stars are the proper subject of my present speculation. The two former were most honoured in Æthiopia, being the progenitors or chiefs of that country ; but the latter—though also of Æthiopian origin—was in after ages, chiefly honoured in Egypt ; where—a demi-god at

* Or one who was at the same time both Warrior and Hunter. The first equestrians were probably Warrior-Hunters : the horse affording in both cases, the ready means of pursuit, and of voluntary and advantageous combat.

the very first—he became at last absolutely deified in the popular creed.—And why? Clearly because Egypt, of all the Sabæan nations, and of all other nations whatever, was, from local circumstances, most powerfully incited to the observance of those seasons of agricultural operations of which the stars of Osiris were the appointed signals. Religion flowed into Egypt from the southward with the Nile. If astronomy did not spring up among the aborigines, it marched with the first invaders. To the constellated Husbandman, the Egyptians were nationally, and traditionally, and habitually, grateful, because—simultaneousness, or contiguity of time, having with them—at least with the uninitiated part of the Egyptian community; become identified with, and mistaken for, originating cause;—they conceived that from Osiris, all the greatest of terrestrial enjoyments were derived; and to him they poured forth their grateful thanksgivings for the continuity of health, and preservation, and all the blessings of this life: and—judging from the interesting discoveries of Mr. Belzoni (particularly the inner apartments of his sepulchral palace)—they appear also to have hoped in a future world to become the companions of his beatitude.

The stars of the Husbandman, having thus become the signals for those successive agricultural labours on which the annual produce of the soil depended, came in consequence to be considered and hailed in Æthiopia and in Egypt, as the genial stars of terrestrial productiveness; to which the oblations, the prayers, and the vows, of the pious Sabæan, were regularly offered up: and in hieroglyphically figuring the constellation by means of sculpture and painting—the crook, immediately alluding to pastoral and vernal occupation; and the winnow, or van,* to those rural labours which annually terminate, or succeed to, the Harvest—became characteristic additions to the figure of the Husbandman; alluding at the same time to the two kinds of cares which are incumbent—not only on

* This Symbol has somewhat puzzled the antiquaries, some of whom have mistaken it for a flail, and others for a whip: but Mr. Knight offers a reason in favour of its being intended for the van or winnow, which seems to settle the question. In p. 132 of his "*Inquiry*," he writes, "Osiris has the *winnow* in one hand, and the hook of attraction in the other.—It is strange that it should ever have been taken for a *whip*; although it might easily have been taken for a *flail*, had the ancients used such an instrument in thrashing corn." This is a Note: and in his text the author says,—“this instrument is called by Virgil, the mystic winnow of Bacchus.”

the cultivator of the banks of the Nile, but of the agriculturist of every country—namely his arable, and his pasture, lands.—These symbols, tend to confirm the supposition that the rites of Osiris were introduced into Egypt from Æthiopia; for if Egypt was a grain country, Æthiopia was a land of cattle, and its race of monarchs were termed “Shepherd Kings;” which again shews connexion with the pastoral staff.—I know that these implements—the pastoral crook, and van—have also been regarded, by writers whose learning and critical philosophy I greatly respect, as emblems or symbols of attraction and repulsion; of preservation and destruction; and this symbolical ground I see no reason to invade. I acknowledge the sovereign of the territory; and at the most shall only desire permission for my astronomical troops to march across it, as across the dominions of a friendly power that is favourable to me and my purpose.

It would appear from the above, that the invention of hieroglyphical symbols, if not coeval with, was immediately consequent to, the constellating of the stars; proceeding simply from the natural endeavour to delineate the sacred figures of the asterisms, upon a system of analogical and consistent principles, which—at least to the initiated,—might always convey the same meaning, and always be understood.

By studying local references of this kind, I conceive that the mystic sense of many of the hieroglyphics, both of Egypt and the more Oriental nations, may be developed. I mean all that portion of them—which I suppose to be not inconsiderable—that has relation to the primitive asterisms. If we could find a celestial sphere of Æthiopia or Egypt, or complete “Chamber of Imagery” with the individual stars delineated thereon, the occult mysteries which cover their sacred edifices with veils of awful wonder, would become easy of explication. But the mystics have omitted the stars, knowing that the extreme difficulty to the uninitiated of ascertaining which clusters or arrangements of these, the hieroglyphical forms were severally supposed to circumscribe, would for ever warrant them in engraving such inscriptions as that which appeared over the portal of Isis,—“No mortal has yet unveiled me.”

The mystery and the difficulty, are rendered yet more mysterious, and more difficult, with regard to Egypt, because the Greeks have *not* (although the contrary has been frequently asserted) copied on their own

sphere, the asterisms of Egypt, but altered those of Chaldea and Æthiopia, which I suppose to have differed in their figuring from the Egyptian, and to have been alike; or at least, formed on the same system.—Pherecydes, Thales, Pythagoras, and other early Grecian astronomers, had travelled to Egypt, doubtless: the facts are specifically recorded by Diogenes Laertius, and others: but they had also been at Babylon, and in Phœnicia (where the same Sabæan system was prevalent) before they taught astronomy in Greece: and finding that greater astronomical *simplicity* prevailed in those countries, and that the Chaldeans were consequently nearer to the fountain head of this science,—they appear—though probably trimming somewhat, in order to accommodate their astronomy to the imposing fashions, the refinement, and the high reputation of Egypt—to have peopled their sphere chiefly with the celestial forms, or with modifications of the celestial forms, which they discovered in the interiors of the Babylonian and Phœnician temples, and on other of the sacred monuments, of those countries; which they probably found it more easy to adapt to the existing state of Greek mythology, hero-worship, and public feeling; and consequently more susceptible of incorporation with their own local customs; with the general state of knowledge, and the infant state of science, among the Greeks.

I beg to submit, my Lord, that—my premises being admitted—enough is above written to shew how OSIRIS, collectively speaking, and understood as the representative of those stars which were the invariable prognostics of certain natural phenomena—came to be venerated as the Deity, or disposer, or originating energy of *productive causation*; of whose astral virtues or effluence, ISIS, or terrene Nature, was the passive recipient, and their annual offspring HORUS, the vernal season, or infant year.

I shall not at present enter the wide space which the mention of these latter deities opens to our speculations, my purpose in this place being merely to shew how soon, how intimately, and by what steps, the science and simplicity of Sabæanism, became blended with the symbolical refinements which afterward constituted the poetical and popular mythology of the Greeks; and how the rustic Husbandman—perhaps the patriarchal Noah, or Xixuthrus—of Chaldea, and Æthiopia—became the Osiris of

Egypt; the Adonis of Phœnicia; the Bacchus of Greece, and finally the Boötes of the modern spheres.—Whether he had, or had not, a mortal and terrestrial existence;—whether an ancient agricultural chief of his own authority gave name to the constellation; or that the stars were after his death, surrounded by the figure of him to whose science and important discoveries and operations whilst living, they bore especial reference,—appears not to disturb my argument.

I conceive this constellation of the Husbandman, to have become *national* to the Egyptians, and that each of the Sabæan nations possessed in a similar manner, its appropriate celestial sign. We read in the 2d book of Kings, ch. xvii. v. 30, that, of the colonies sent by the King of Assyria to repeople the desolated cities of the Hebrews at the era of the Samaritan captivity, “the Men of Babylon made Succoth Benoth; the men of Cuth made Nergal; and the men of Hamath made Ashima; all of which were constellated and tutelary, signs:” just so, had Egypt been at the time under the government of Shalmaneser, and had a colony been sent from thence,—the men of Egypt would have made Osiris, (Tham-muz,—or by whatever other epithet that constellation might have been designated in the language of the writer of this part of the Jewish history :) of which the essential meaning would have been, that by the Sun’s place in the ecliptic with respect to the stars of the constellated Husbandman, those invaders would have regulated their seed time and harvest, and in general all those manual operations and those anniversary festivals, which have always been regulated by the Calendar, where Calendars have existed.

Such are the opinions which I have been led to form; such are the conclusions to which I have been brought, by a careful study of this part of my subject; and I thus account for the local and transcendental, and the lasting, importance of Osiris as the tutelary sign of Egypt. “The rolling year was full of him; and the seasons themselves as they changed, were “but the varied God.”

Now, if we could positively assure ourselves of this as a certain fact; namely; That in Egypt, Nubia, and along the banks of Nile, from Mount Arambo southward:—wherever we find temples sculptured with his

* Aries is now, by the *modern Chaldeans*, held to be the tutelary constellation of England.

figure;—wherever his statues are found,—and wherever (as at Axum) are found, those remarkable small monuments which have been wisely conjectured to have been intended to answer some of the purposes of a Calendar—(I mean those, where this deity is represented as standing on two crocodiles, and holding in either hand zodiacal signs).—If, I repeat, we could ascertain as an incontrovertible and no longer questionable fact, that all along this rich and antique vale of Nile, OSIRIS, corroborated by the asterisms of the zodiac, was the sacredly established nocturnal *sign*, what an important leading truth it would be! What a constant and capital index! What a mythological theorem! and what gleams of celestial light it would throw into the recesses of those sublime cavern temples, which have hitherto excited so much of laudable curiosity and antiquarian hope!

Though I am persuaded that this is the case, no man can be more assured than I, that no attempt should be made to extend this *persuasion*, as such, to others. Securer and more scrutinising habits of research, must here be resorted to. Rational conviction is wanted. Begin such an argument where we will—Paint we “an inch thick,” with the fleeting or fallacious colours of Fancy, or the garish rhodomontades of etymological conjecture, to the mathematics of astronomy “we must come at last.” I therefore propose, my Lord, in what remains of the present essay, not to paint at all; but to proceed right onward, as nearly as I may be able, to the mathematical mark.—Wherefore, after removing an obstruction that is not very formidable, we will, (if your Lordship should so please,) return to the eternal stars, and trust to them for connecting these ancient matters of fact and matters of fable.

In answer to the objection which has been raised on the ground that those mythological circumstances which relate to times, seasons, and the Osirian rites, have been variously reported; I should say—True: they have been variously, but not inconsistently, reported, for the seeming inconsistencies; that is to say, the differences with regard to the occupied portions of time; when astronomically and geographically considered; and when we take into the account the popular veneration for the stars, and the importance of the dependence placed on those manual operations, of which they were the signals; and when we further reflect,

that these physical consequences and this religious veneration, ran through various climes—these very discrepancies, become a bond of consistency: the objections are converted into firm supports: being in fact no other than the detailed corollaries of local accuracy; which must of necessity, have been as we here find them, and which, had they not been thus found, would have afforded evidence of mistake or deficiency.

But (an objector may persist) what can be said for such variations in the legend, as Typhon dividing the body of Osiris into *fourteen** pieces and into *twenty-six*?† These numbers are both reported,—the latter by Diodorus Siculus, the former by Plutarch: and what differences of latitude? or what other reason or cause, can reconcile such differences as these?

I answer that, philosophers so venerably bearded as Plutarch and Diodorus, have no right to expect that us moderns should be able to reconcile all their differences: yet a reconcilment of the present is far within reach.

We perceive no indications in their writings, that either of these authorities, possessed more than a sort of hear-say knowledge—a few of the more frequent phrases, or so—of Astronomy. It is not unfair to infer that they would else, on fit occasions, have discovered their information, whilst treating of events that bore relation to this science; whereas, notwithstanding that Plutarch in discussing this very legend, as well as in other places,—makes not unfrequent use of astronomical terms, he gives us no reason to believe that he possessed the power of rendering the visible phenomena of the starry heavens subservient to his literary purposes, or was acquainted even with the simplest uses of an astronomer's globe; but the contrary. Indeed, as Cicero speaks of the sphere, or rather planetarium, of Posidonius,‡ as a curiosity, it would appear that such

* Isis and Osiris, Baxter's translation, p. 75.

† Booth's Diodorus, p. 9.

‡ A reflective Englishman cannot but be struck with such a passage as the following in the writings of the Roman Orator, "If (says he) that sphere lately made by our friend Posidonius, which shews the courses of the Sun, Moon, and five wandering stars, as they are every day and night performed, was carried into Scythia or Britain, who in those barbarous countries would doubt that reason presided in that work?"—*Franklin's Translation of M. T. Cicero on the Nature of the Gods*, B. ii. p. 134.

machines were by no means common under the earlier Cæsars, if they were at any time common in ancient Rome.

Plutarch appears to have possessed ordinary acquaintance (and no more) with the Solar and Lunar astronomy of his time, and to have been comparatively ignorant of the phenomena of the constellated heavens. Having listened to some vague and uncritical rumour, or to some general expression, of an event consisting of a series of sidereal and particular facts, which (from too careless attention, perhaps) or from want of rudimental information on the subject) he did not comprehend, he echoes that the Osirian Mythologue had astronomical references. But, as echoes are more or less imperfect according to the rocks or other localities that reverberate the sounds; and as the Hudibrastic echo to the word Bruin, was "*ruin*"—so it has happened here: "the separation of Osiris into fourteen parts" (says our learned moralist and instructive biographer) "sets forth unto us symbolically, the number of days which the moon is in decreasing from the full to the change;" which is a mere coincidence of the number 14, without any kind of physical analogy to support its application. In fact, in Plutarch's endeavour to apply it, he is driven to an irrelevant refinement contradictory of his own subsequent assertion; for Osiris is, elsewhere in his essays, treated of as being the Sun, and Isis the Moon:* yet here, in order to make out a temporary hypothetical case, in seeming explanation, he says, "Those who join with the physiological accounts, certain mathematical matters relative to astronomy, suppose *Typhon* to mean the orb of the *Sun*, and Osiris that of the Moon:"—(Thus far Plutarch).—Now, although from a natural error for which I have already accounted, commentators have in numerous instances, attempted to identify Osiris with the Sun; yet this absence of critical philosophy; as well as of recollection; this occasional license of

* See Baxter's translation, in *Plutarch's Morals*, vol. iv. pp. 112, 13: notwithstanding which, in his summary, our philosopher delivers the following as his own more especial sentiments: "It is not reasonable to believe that either the water [Nile] or the sun, or the earth, or the heavens, is Osiris, or Isis: nor again, that the fire, or the drought, or the sea, is Typhon: but if we simply ascribe to Typhon, whatever in all these, is, through excesses or defects, intemperate or disorderly; and if, on the other hand, we reverence and honour, what in them is orderly, good and beneficial, esteeming them as the operations of Isis, and as the image, imitation and discourse of Osiris, we shall not err."

compleat inversion of proper epithets; and of physical cause and effect, (in which some modern scholars are so prone to indulge with Plutarch, without redeeming themselves like him,) it would be ridiculous to set about either maintaining or refuting by logical rules:—and Plutarch is right in his general inference of an astronomical fact being involved in the fable, though wrong in his particular conclusion.—Let us therefore return from this excursive digression, to our proposed reconciliation of Diodorus with Plutarch;—let us return to those correspondences between the reported number of parts into which Typhon divided Osiris; and to those mystic resemblances between mythological fable and astronomical fact, that run along with them in analogical parallel; and again convert temporary and seeming objection, into solid and lasting support.

It is some satisfaction to know, that notwithstanding the variations of form which the outline of the constellated Husbandman has from time to time undergone, in the course of its transmission, the stars which are engaged in it still remain as they were probably enregistered in the *Almagests* of Egypt and of *Æthiopia*. The patient observation, and the more perfect instruments, of Hevelius and of Flamstead, have indeed increased their number to upwards of fifty; but, reckoning down to stars of the 5th magnitude inclusive—which is as far as the ancient votaries of Osiris, even in the clear nocturnal atmosphere of the Sabæan climates, could have been enabled to perceive without telescopes—their number is *twenty-six*.

It was the discovery—(which I might almost call casual)—of this numerical coincidence between the aggregate of the stars of the Husbandman and the record of Diodorus; combined with an opinion that Plutarch would not have written of astronomical references—however misapprehensively—without *some* foundation, that led me to investigate what dividing the body of Osiris into *fourteen* pieces, could really mean; and to have recourse to that celestial globe which has conducted me to the following results.

The fable of the dismemberment and cutting to pieces of Osiris, by Typhon—of which no simple, consistent, and rational, explication (that I ever heard of) has yet been offered—alludes to the successive acronical disappearance of these twenty-six stars, which of necessity follow each other as they sink beneath the horizon.

The Typhon of ancient mythology, appears to have been—as Plutarch in his summary seems to intimate—occasionally, every thing that is injurious, or destructive. He might be termed the power or dæmon of destruction. In the present case he is incarnate—(if this term might be thus used)—consubstantiate rather,—in the Ocean. The legend with elegant analogy, says, “Typhon was hunting by Moon-light when he met with Osiris.”—this shews the mystic reference to be to a nocturnal event—It proceeds—“and he divided the body of Osiris into *fourteen* pieces,” according to Plutarch; but Diodorus says, “*twenty-six*.”

Typhon, then, is here, that Ocean which the ancients fabled or believed to surround the Earth, and into which the stars of the Husbandman, in their turns—(like all other stars)—successively appear to sink: yet as they sink, sometimes singly, and sometimes two or more together, their actual number of descents, or settings, is but fourteen—as I shall presently shew, and as any of my readers having a celestial globe before him, may easily satisfy himself.

We have seen that Aratus considered the splendid and beautiful star Arcturus, as not belonging to the constellation. Even at present, although it is marked with the Greek *alpha*, in the modern enumerations of the stars of Boötes, it does not, on most of the modern spheres, fall within the outline of his figure: but that the more ancient Sabæan, or Chaldean, astronomers thus regarded it, we cannot be certain; and this doubt threatened for awhile, in some sort to baffle—at least to affect with some degree of disturbance—the accuracy which I wished to attain, in solving this problem by the sphere. It may be thought worthy of remark, as a curious coincidence, at least,—that, notwithstanding that the different degrees of obliquity of the descension of the stars of Boötes (or Osiris) in the several latitudes of Babylon, Thebes, and Saba, occasion the plural settings not always to consist of the same identical stars, yet that in all these places the number of descents of the twenty-six stars, is constantly *fourteen*: that is to say, at Babylon they are 14 exclusively of Arcturus: at Thebes the same: but in that more southerly latitude which I have ventured to assign to the ancient Saba, the star δ in the right thigh

of the figure, setting at the same moment with Arcturus, the number of descents is still precisely 14, whether Arcturus be included, or not.

Attaching then the solution of our problem to the latitude of this ancient Cushite metropolis, (Saba,) we, by means of the stepping-stone we have discovered in the star δ , get beyond our scepticism with regard to Arcturus, without at all affecting the general merits or principles of the main question at issue.

Still, however, when I came to a calm and critical review of my own proceedings, my satisfaction was imperfect. There was indeed explanatory justification of the number announced by Plutarch; and announced by him as resting on an astronomical foundation; Diodorus also was numerically met; there was an agreement of no common confirmation and no ordinary kind; there was the result of concurring, though unfederated, testimony, which is always powerful and persuasive: but—I still had scruples to satisfy. I had hopes to confirm or abandon. I had wishes that assurance might become doubly sure. A certain mathematical seal of exactitude, was yet desirable in the way of ratifying my antiquarian peace. The co-descent of Arcturus with the star δ was but a trifle when compared to the superior consideration of a *particular season of the year* appearing by the most authentic transcripts of the Osirian mythologue, to be denoted with very precise reference to the annual state of the constellated heavens, and the place of the Sun, at the remote era, and the far off place, when and where the mystic rites originated. The coincidence of the fourteen settings of the twenty-six stars, was very remarkable: but at Babylon, and even at Thebes, it appeared to be too tardily followed by the heliacal rising of Aldebarân: for notwithstanding this star rose on the very morning after that of the descent of the last of the constellated Husbandman; yet it rose too exactly with the Sun. Space in the heavens, and time upon earth, must be allowed for Aldebarân to get clear of the solar radiance, so as to become visible; for the very ancient Sabæans do not appear to have possessed artificial spheres whereby to ascertain and manifest the actual rising of a combust star—that is to say, a star immersed in the rays of the sun. They must have

waited until they actually saw any given star, before they announced, and before they publicly celebrated, its ascension.

Moreover, I had learned from a profound Essay on an important branch of the astronomy of India, which appeared in the Asiatic Researches, (to which Professor Millington had pointed my attention) that Cynosura was not always the Pole-star: that the *Alpha Draconis* appeared to have enjoyed that honour, some eight and forty centuries ago: and that consequently, when the rites of the constellated Husbandman were instituted, all the stars must have risen and set with very different degrees of obliquity from those of their present risings and settings. Here was a dilemma somewhat embarrassing, if not appalling: for it amounted to no less than a discovery that, the antique problem which I wished to solve with accuracy, could not be satisfactorily discussed by means of a globe, mounted as all celestial globes are mounted at present—such globes being invariably accommodated to the purposes of modern astronomers; and not of astronomical antiquaries.

How was this to be remedied? If I calculated back to any far distant era; and,—ascertaining the then place of the solstitial colure and the axis upon which the celestial phenomena then revolved—rehung the sphere; I should only be possessed of a sphere suited to that single period (of a few centuries at the most) as modern spheres are suited to the present: whereas I wanted a sphere, suspended, as the Great Cause of all, has suspended the starry heavens with reference to our planet; and *vice versa*: that is to say, with the pole of the Equator and that of the Ecliptic possessing powers of respective circumvolution, and capable of being adjusted to any period of time, past, present, or to come.—And this, not only because I had other problems to solve, referring to far distant periods of time; but because, in the present instance, I could not be certain *à priori* of the exact place of the pole. Having no precise era to set out with as a datum, trial by means of the artificial sphere, became one of my experimental tests. Both time, and place, were to be explored and ascertained, reasoning from such other and scanty premises, as war and superstition have spared, and art and science have transmitted.

From this main difficulty, which much embarrassed my proceedings,

and threatened for a while to stultify my hopes of astronomical accuracy, I have been relieved by the science, and liberality of communication, of Mr. Lee of the Royal Society. A globe with circumvolving poles, capable of any adjustment with regard to the colures, has been constructed and mounted under his obliging superintendence; and, by its means, I am enabled to lay before your Lordship and the public, a tolerably faithful statement of the acronical settings of the stars of the Husbandman, at the time when his mystic rites must have originated, and when *Al-debarân* was really as well as nominally, the *leading star* of the hosts of heaven.

With the Alpha Draconis for its pole-star, and with the pole elevated to 15° North, I shall proceed to submit a sort of tabular view of the astronomical details of our Osirian problem; by which will be seen the order of the successive descensions, under the above circumstances, of the twenty-six stars of the celestial Husbandman, whom we have alternately designated, or recognised in different countries and languages, as Osiris, Boötes, Bacchus, Sabazeus, Adonis, Dionusos, and Noah.

The ancient city of Axum, according to Bruce, is nearly in lat. 14° . The Western Saba, otherwise Meroë, is to the Northward of this city: but the exact latitude of either Meroë, or the Saba of the Homerites and the Arabian peninsula, is not known. Neither of them, can have been far from 15° North; and, lying so nearly under the same parallel, Astronomy alone,—without some aid from her sister muses, or from the researches of antiquarian travellers, (whom the fearful rites of Mohammed joined to the hazards and privations of a torrid clime, have nearly interdicted,)—finds it impracticable to distinguish between these ancient cities so as to pronounce with certainty which was the cradle of astral science and of the Osirian mysteries.

TABLE of the Descension of the Stars of the Constellated Husbandman now called Boötes, in the latitude 15° North, at the time when the Alpha Draconis was the Pole-star.

Order of Departure.	No. of Stars.	Denomination and Description.
1	1	τ , Tau, in western leg.
2	1	η , Eta, in ditto.
3	2	α , Alpha, or <i>Arcturus</i> , and the roman d in western thigh.
4	2	ζ , Zeta, and π , Pi, in eastern leg.
5	1	$\omicron$, Omicron, in ditto.
6	1	ξ , Xi, in ditto.
7	4	ϵ , Epsilon (or <i>Mirach</i>), σ , Sigma, ρ , Rho, in girdle and body; and the roman A under arm.
8	1	ω , Omega, in eastern hand.
9	3	ψ , Psi, in ditto, γ , Gamma, near arm-pit and roman C of 5th mag.
10	2	χ , Chi, in pastoral crook, and an unmarked star in neck, of 5th mag.
11	2	δ , Delta, in western shoulder, and another of 5th mag. in pastoral crook.
12	2	λ , Lambda, in western arm, and another of ditto in neck.
13	2	β , Beta (or <i>Ras</i>), and μ , Mu (or <i>Alkaturups</i>).
14	3	κ , Kappa, ι , Iota, θ , Theta, in western hand.*
—		27 including Arcturus.
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* The three stars last mentioned, and which are now engaged in the upheld hand of the figure, were I suppose denoted on the Egyptian planispheres by the mystic van of Osiris. The reader will probably have remarked the three divisions of this van, in the larger and more elaborate Egyptian representations of their tutelary sign. I am pretty certain too that I have seen the three stars sculptured—one on each of the divisions of the van—in some of the larger Osirian figures, though I do not at this moment recollect where. In descending, they rather skirt the horizon (as Milton's phrase is) that is, the artificial horizon of the sphere, than absolutely sink beneath it: yet in nature, they must certainly have been invisible, and the whole constellation

It will soon appear—perhaps I should have assumed that the reader has already perceived—that the numerical coincidences which I have exhibited between the setting stars and the writings of Diodorus and Plutarch, cannot possibly have any such relation as is fancied by the latter, to the phases of the Moon; but that they refer to a season of *annual* recurrence; and on a subject so remote in time and place, and so confessedly mysterious in its nature, I might further have been allowed to anticipate, that even the driest, or most rigid matter of fact men, would not expect a nearer approach to demonstration than I have here the honour to submit. I own that to me it appears every thing short of positive literary record, and in a case too, where positive *ancient* record, transmitted from the time in question, is not, and cannot be, expected; because it is pretty well ascertained, either that no archives exist, or that such archives as do exist, (in the arrow-head character) can no longer be read.

I chiefly address myself here to critics and scholars, who will easily perceive whether or not I indulge in any overweening self-gratulation. Should the above be admitted as the true interpretation of the origin of the Osirian mystery in the aggregate, the minor details will not be difficult of explication on the same system: The parts will fall in and accord with the whole. Taking the rites which commemorated the first *Pamylian* observance as an example—It will appear that, whatever agricultural operations, or suspension of operations, may have been signified thereby, the fabulous or mystic allusion was to the sign; and the sign, was either the detachment of *Arcturus*;* on the excision (that is the descent) of *Mirach*—I shall leave it to the learned to settle which, only observing that they are both important stars, and near the middle† of the figure; and that no other than a fabulous separation, or dismemberment,

absent, in this low latitude, for about the three or four days which are mentioned in some of the versions—while the *Zetesis* or search was proceeding, and the women of Phœnicia and Jerusalem pretended to sit weeping for the wonder, Thammuz: after which these three stars would immediately reappear below and to the Eastward of the *Alpha Draconis*.

* A mistaken Greek version as I suspect—or a corruption—of the Egyptian or Arabian name of this star. The tail of the *Bear* could never have reached to Arcturus.

† I know not the meaning of the Arabic *Mirach*: but there is another star of this name similarly situated with relation to the figure of Andromeda.

of annual recurrence, could possibly be meant by it; since the generation of him who has been called the Egyptian Harpocrates, was subsequent to this critical event. The *phallic* festival, which forms a sequent part of the story, I conceive to allude to the reappearance of the star so cut off, in the Eastern quarter of the Heavens; or on the cusp of the ascendant; which is the genethliological station of increasing vigour and influence.

And this re-appearance, in this place, under circumstances that are very remarkable, and pregnant with analogical, yet mysterious, meaning, I was led to perceive, when I submitted this antiquarian problem to the test of my new globe; for precisely at the moment of the heliacal rising of the brilliant star *Spica* (the *Alpha* of Virgo, and near the middle of her figure) arose also the *Alpha* (*Arcturus*) of the Husbandman. Human ingenuity could scarcely have devised an astral allegory* more homogeneously mystical. Aratus or Eudoxus appears to have observed that the *Spica Virginis* and *Arcturus* were on the same meridian, and perhaps the former may have entertained a modification of the same conjecture with myself, when he wrote of the stars of the Husbandman—as rendered by Cicero in his version of the “*Phenomena*.”

“ Subter præcordia fixa tenetur
Stella micans radiis, Arcturus nomine claro
—— cui subjecta fertur
Spicum illustre tenens splendente corpore Virgo.

Of the mystic ceremony relative to the *head* of Osiris (or Adonis), I have treated in the preceding essay, and have only to add that in the Arabian astronomy, the star *Beta*, is still known, as it has ever been, by the name *Ras*, which is literally the *Head*: and that I rather think, from reflecting on what History has transmitted relating to the Osirian ceremonies, that the setting of the star *Ras*, was esteemed to be the final astral event of the *Aphanism*, if not of the mystic series; and that the stellated Noah always “put forth his hand.” It requires however, that we go

* I believe it is Costard, who says, or insinuates, that Virgo was in the oldest planispheres, nothing but a Harvest wench, and no better than she should be: or in other words,—nothing loth to meet a *Husband-man* half way.

back to the period of the polar reign of the *Alpha Draconis*, for these stellar events to follow in the above order of succession.

But of all the attendant circumstances, that which will probably be regarded as pre-eminently revealing the mystic relation between the ancient legend and the unvarying phenomena of the constellated heavens,—or rather as *hermetically* sealing the revelation—is, that in the *Æthiopian* latitude which is above specified, on the very morning after the acronical departure of the last of the stars of the Husbandman, Aldebarân rises *with the vernal Sun*! Aldebarân! of the first magnitude: literally the *leading* star of the new year; and really the leader of the host of Heaven, or *Saba-oth*, at the remote era when the rites of Osiris originated—that is to say, about forty-eight centuries ago; for Aldebarân is 67° to Eastward of the present place of the vernal equinox, and $67^\circ \times 72 = 4824$.

My meaning is that Aldebarân, under the above circumstances, has attained a right ascension of rather more than 14° , on the morning subsequent to that of the disappearance of *the Head*. The reader will recollect here, that in endeavouring to solve this problem by means of a globe having Cynosura for its pole-star, I stated that the rising of Aldebarân followed too immediately the setting of Alkaturops—that, notwithstanding its appearance above the wooden or artificial horizon of the globe, it must in nature have been obscured at the time by the solar radiance. This objection is now satisfactorily obviated. The leading, or foremost, star, has attained an elevation of somewhat more than 14° , which I suppose would about correspond in space with the time, which Sir William Drummond has ascertained to have been allowed by the ancients* for the emergence from the Sun's rays of a star of the first magnitude. The astronomers of our own latitude, I believe, allow from 10 to 12° : Sir William speaks generally of “the ancients,” but the further we travel to the southward, the less

* “The ancients allowed twelve days for a star of the first magnitude to emerge from the solar rays.”—*Memoir on the Antiquity of the Zodiacs of Esneh and Dendera*, p. 100. In the next page Sir William treats of “twelve, or according to some, fourteen days” being allowed for the emergence of Sirius; notwithstanding that Sirius, not being of the Zodiac, must be less affected than the zodiacal stars, by the solar radiance; and is the very largest of the fixed stars.

twilight we experience, and the more powerful, and rapidly penetrating, are the rays of the Sun.

Concerning the space of time occupied in the departure of the stars of Osiris certain discrepancies should be noticed. It should be borne in mind that Theophilus of Edessa, on whose authority Mr. Knight has reported the forty days, was chief astrologer to the Khalifal Mohdi, and was a person not unlikely to have been in possession of the details, with their astronomical reasons (or at least some smattering of them) of the Æthiopian, Egyptian, and various other versions of the ancient mythologue. When required to specify the length of time occupied in the mourning rites, the astrologer is very likely to have stated (as would clearly be most judicious for him to do) the medium, or mean, time, which is that appertaining to the latitude of Thebes, the medium station, and the reputed Egyptian birth-place of Osiris; (which means no more than that Thebes was the place of his introduction into Egypt). This mean time is forty days;—or, the information may have been required from Theophilus somewhere else about the 25th parallel of North latitude, (perhaps at Medina, or at Mecca). At Babylon and Byblos—owing to the greater degree of obliquity of the descension of the stars—the departure of the constellation occupies a few days more; and at Dedan and Saba it is only thirty-six days from the beginning of the Aphanism to the heliacal rising of Aldebarán.

Wherever the Osirian rites were celebrated, this descension of his stars, was regarded and lamented as the *death* of Osiris: and it is curious to reflect, that this fabled, or figurative, or astronomical, death: is not only now traceable on the sphere, but in the progress of language also—the words, *Occido*, to kill; and *Occidens*,* West, or the place of Sun,—and Star-set—being derived from a root in the primitive language, which includes both these meanings: *Death*: and *Western descent*—that of the Sun and Stars being more emphatically understood. And this equivocal, I have no doubt, is intimately connected with the decyphering of many an hieroglyph.

I need scarcely recapitulate that we are here supposing the twenty-six

* *Orient*, or the place of sun-rise, is from the radical or primitive Hebrew אור *Aur*.

stars of the Husbandman, as successively sinking during the Crepusculum, or short-lived morning twilight of the Southern climes. They disappear during "the glancings of the dawn" (as it is expressed in Job)—the prime season of ancient sidereal observation, when the Sabæan astronomers with pious intensity and scrupulous exactness, watched the descent and rising of those stars, which were to them, at first, "for signs and for seasons," and afterwards for deities; and that, on the very morning subsequent to the disappearance of the last of these stars, arose the brilliant leading star of the new year.

Here then (my Lord) the forty days, which a learned scholar and critic has ascertained to be the time of mourning for Osiris, where his rites were duly observed—are measured out by the period of the departure of his stars; the season of the year accords with that which, from a comparison of various authorities (including those of Macrobius and Plutarch) has been ascertained to be that of the Osirian aphanism; and for the rejoicing at the close of the ceremonies, there is adequate cause, it being the festival of the sacred ushering in of the vernal season, and celebrated throughout all the East, as the most genial and heart-stirring holiday of the solar year.—Just after the close of the mournful rites, and precisely at the time when the Aspirants and the Sabæan public joined their priests in loud pæans to productive causation—When they shouted, Rejoice! we have found him! arose the Sun with the splendid Aldebarân; the Tauric leader of the host of Heaven forty-eight centuries ago, when on the planet we inhabit, Art and Science were in their infancy, and to which the most ancient monuments of all the Sabæan nations refer.

Should this date be found a little too early for some of the systems of sacred chronology; it will in the same degree, serve to confirm others, amongst which are those of the Septuagint, Eusebius, Isaac Vossius, and Walton. If Noah be the original constellated Husbandman, it supposes his apotheosis, or translation to the skies, to have taken place 756 years after the Deluge; which allows for the three centuries of his post-diluvian life.—In fact, if we suppose the patriarch to have been constellated immediately on his decease, it exactly divides the difference between those

who assert the *earliest*, and those who have adopted the *latest*, system of Chronology, which difference amounts to 700 years.

It will finally remain for the general reader to judge whether this remarkable coincidence of the celestial phenomena, with the times, circumstances, and leading features, of the scriptural facts relating to the Deluge, and those of the Osirian ceremonies, do not entitle the interpretation which I have the honour to offer, of these mysteries, to be received as the true one, notwithstanding that the rejoicings with which the mysteries closed, may not seem at first sight, to be acclamations for the found Osiris. But, I would request him to suspend his opinion on this point, for we shall presently perceive the mystical nature of the allusion, and how these festal rejoicings connect themselves with the systematic analogy which pervades the whole story.

With the exception already mentioned, of the stars *Kappa*, *Iota*, and *Theta*, the constellation in question, does not, in the low latitude to which I am here adverting, begin to reappear in the Eastern quarter of the heavens, till after the lapse of about four months. The stars of Taurus have now declined westward, and Virgo is rising heliacally. It will presently be perceived that I mention these circumstances with some reference to the scriptural accounts of Noah and the Deluge.

In the low latitude of our present problem, the stars of Ursa Major—otherwise termed the ark of Osiris—also set; and the last of its stars, *Benetnasch*, returned at the period under discussion to the Eastern horizon with those in the head of Leo, a little before the season of the Summer Solstice. The stars of the Husbandman soon followed:* the chief of them, *Ras*, *Mirach*, and *Arcturus*, being very nearly simultaneous in their heliacal rising.

The stars of *Ara* (the Altar) too, which have been supposed to be connected with those which record the leading circumstances of the Deluge, (the Altar having been held to be that on which the patriarch offered his first post-diluvian sacrifice) rise in these Æthiopian latitudes, while those of the Husbandman embellish the Oriental quarter of the heavens; and they come to the meridian nearly with his latest.—These things are no-

* They followed, at the same hour of Sun-rise, in about a month.

ticed, at once for the sake of truth, and for the gratification of those persons who may desire to pursue the hints which I have thrown out, that the constellation Boötes may be the patriarchal Husbandman Noah, and that the more prominent features of the great Deluge may be commemorated on the sphere: or *vice versa* (as some others have supposed) that the annual progress of the stars and succession of the seasons, may possibly have originated the history, or legend, of the Deluge.

I shall venture to add here, what has been demonstrated to the best of my belief and ability, in my account of the interesting Assyrian monument which now reposes in the royal library at Paris—namely, that the stars which Conon converted into the Coma Berenice, were in the more ancient Chaldean planispheres, constellated as a Dove.—Whether this dove, which subsequently became the standard of Semiramis and Assyria, was originally the Dove of Noah—for the modern *Columba Noachi* is clearly out of the question—may perhaps be determined from reflecting that the first stars of the Dove, rise with the latest of those of the Ark, and the latter stars of the Dove simultaneously with those of the hand* of the Husbandman.—At least these are curious coincidences.—In setting, the Dove follows the Ark, and precedes that descent of the Husbandman of which the details have been submitted—the last of its stars (H 32) sinking with the *Tau* or earliest of the Husbandman.

Returning to the shoutings and revelry, which succeeded to those lamentations with which the mysteries of the constellated Husbandman and first cultivator of the vine, were annually closed—It appears to me that the whole is susceptible of a symbolical or analogical interpretation, of which the parts are held together by a mystic correlation, or correspondence, between the celestial and terrestrial phenomena: and which interpretation, at the same time that it helps to explain how the symbolising system of mythology, grew out of Star-worship—will explain also how the uninitiated Sabæans—or those who in subsequent ages have undertaken to construe their belief—came to mistake Osiris for the Sun, and the Sun for Osiris.

* Genesis, viii. 9. says that Noah “put forth his hand and took her.”

In my Essay on Signs and Signets, I have endeavoured to point out that the error—in a liberal view, the very pardonable, yet the cardinal, error,—of the Sabæans, consisted in the votaries of that superstition mistaking contiguity of time,—which has been held to be one of the necessary modes of the connexion of human ideas—for causation; and offering that worship, or attaching that sentiment of veneration, to the concomitant sign, which could be due only to the First Great Cause. These mistakes which in the minds of some, degenerated into wilful impostures, have been the very central pivots of ancient superstition; and the juggling judicial astrologers of Babylon and Memphis appear to have been at no loss to *turn* them to deceptive and selfish account—sometimes by direct obtrusion of the sign on the vacant sense of the suppliant; (seizing as it were, and engrossing, his attention;) at others, stimulating his imagination by obscure indications, to the utter confusion of his judgment; and at others again (as in modern fortune-telling) their craft consisted in mere plausibility, addressing itself to the credulity of the vulgar, and helping itself onward by catching at vague semblances, and creating occultness.* The progress of Science was with them, not a primary object. They sought Truth that they might adulterate or conceal it, while they diffused error with impunity; for their view was, not to enlighten, but to govern, the minds of others.—Such were the impostures that were successfully practised in the East during those early ages: nor have they yet ceased. Juggling tricks of this kind (as the acute and profound Michaelis has not failed to observe,) were severely punishable by the Mosaic laws.†

But there was a co-existing state of genuine astronomical and metaphysical science; and those hierophants and mystics of antiquity, who were really in possession of the sciences, were not only sincere amongst themselves, but were far more philosophical and profound than some modern writers have given them credit for. Their monuments attest this; and

* A very delusive word, which to such impostors has been of the greatest service.

† See ch. ii. of the 4th vol. of his "Commentaries on the Laws of Moses:" particularly Articles ccliii. iv. v.

Sir William Drummond, in his learned antiquarian dissertations, has abundantly shewn it. Indeed, the very jugglery which is alluded to above, affords convincing evidence of the fact: for had not the מכשפם (*Mecasshiphim*) of the early scriptures, been able by calculation to foreknow when the Sun or Moon would be eclipsed,* they could not have known when to perform those incantations, and when to affect those grimaces, which they pretended were necessary preparations to *their cutting* the greater luminaries, or, on other occasions, to their relieving those luminaries from everlasting darkness. We now approach the final division of the subject of my present Essay.

I apprehend that the sacred, or religious, initiations of antiquity—such as the Samothracian, and Eleusinian, and those *more* ancient mysteries of Egypt and Phœnicia from which they were derived,—consisted chiefly in being permitted to look, under the guidance of science, behind the veil of concomitant signs, and seeing by actual representations, the things signified. They were probably, a philosophical developement, and consequent disconnexion of the vulgar and habitual association of ideas, including a revelation, in part at least, astronomical—of the natural and proper relation between physical cause and effect, and terminating perhaps in a final reference to the Great Originating Cause of all.—Why else does Aristophanes cause a dramatic representative of the Initiated to say “On us alone does the orb of day shine refulgent?” Why else, during the sacred disclosures, was the *Sun at midnight*† shewn to the aspi-

* Michaelis says that, eclipses of the Sun and Moon are sometimes called from an Hebrew or Arabic, verb *Casaf*, *Keschef*, or *Cusuf*, signifying to *cut*. He adds that “the word כשף seems in the Bible to mean a person who occasions solar or lunar eclipses; that is, from his astronomical prescience of their approach; making all manner of grimaces, singing songs, and so affecting to enchant the heavenly bodies. Now, among nations unacquainted with astronomy, this is a common species of knavery, which gains great respect to its author, and sometimes gives him a handle for all variety of extortions from the people, that he may be prevailed upon to relieve the Sun or Moon, from that everlasting darkness in which by the mere power of his art, they would otherwise remain involved.” I think however, that this fancied Sun and Moon cutting, could only have been listened to by the very lowest of the ignorant, and chiefly of the Jews themselves.

† “Apuleius mentions seeing the Sun at midnight, among the circumstances of initiation

rant?—What could this mean but his place at that hour in the Zodiac, at any given season, and with reference to the nocturnal meridian—exhibited, as I should suppose, something in the way of Walker's or Lloyd's* Eidouranion?—And wherefore was this done? Wherefore, but because the Sun, though really the agent of Providence, must to the eye of ancient Sabæan philosophy, have appeared to be the immediate cause of those natural phenomena, of which the vulgar knew, or were taught, only the concomitant stellar signs, and regarded them only with the wonder and the implicit faith of superstitious ignorance?

Since the above was written, I have met with the following commentary by the learned and erudite T. Taylor, which† appears to me to be entirely susceptible of astronomical construction, and to admit with difficulty of any other.

“In my dissertation on the Eleusinian mysteries, (he says) I have demonstratively shewn that the most sublime part of *Inspection*, in these mysteries, consisted in beholding *the Gods themselves*, invested with a resplendent light. It appears that in the mysteries of Diana, [the moon] that Goddess was rendered visible to the eyes of the initiated; and in the following passage (from Proclus,) we learn that the *Gods* were seen in all the mysteries.

“In all mystic sacrifices and mysteries, the gods exhibit many forms of themselves, and appear in a variety of shapes: sometimes *an unfigured light of themselves*, is held forth to the view; sometimes this light is figured according to a human form; and sometimes it proceeds into a different‡ shape.” I shall here beg leave to offer a few remarks.

First: The celestial asterisms, or rather, the inhabitants of Heaven—which includes the planets also—must be understood, when the author or Proclus, speaks of, or alludes to, the *Gods*. Secondly; The primitive idea which he has obscurely and enigmatically related.”—Knight's “*Inquiry into the Symbolical Language*,” &c. p. 135.

* In the elaborate and scientific publication of the Dilletanti Society, traces of such scenic exhibitions having been presented to the aspirants at Eleusis, are indicated with as much precision, as the remaining vestiges will warrant.

† In his translation of Pausanias, vol. iii. page 237.

‡ Plato's *Repub.*, p. 380.

of Gods, according to a passage I have already cited from Herodotus, is “*Disposers*,” such as the Sabæans believed the planets and constellations to be, astrologically speaking. Thirdly: By “an *unfigured light* of themselves,” must be understood the constellated groups of the *stars only*, as we behold them on the planispheres and other astronomical monuments of China*—and on some of the larger globes published by Cary—uncircumscribed by any forms. Hence it is easy to apprehend, that Proclus means, that these congregations of stars were at other times surrounded by “human forms;” and again, in other instances, by “different shapes”—a large proportion of the asterisms not being of the human form.

In maintaining that these mysterious exhibitions were essentially of astronomical reference, I am far from insisting, or from wishing your Lordship or any of my readers, to infer—that the rites and ceremonies of initiation were confined to astronomical disclosures. The contrary is indeed upon record: yet, we must bear in mind, that the recorders were those who could only guess; for had they known, they might not have told. So far from it,—they were bound to present to the public only the mask of mystery. The learned Greek professor of St. Andrews, says, “These rites, from the care with which they were concealed from the vulgar, obtained the name of mysteries.”† And the word *Mystery*, (as my friend Christie informs me) comes from *Mistur*, literally a masked or hidden thing.—I imagine that the religious “Masks” and “Mysteries” that were of old represented within our Gothic Cathedrals, are derived from those of more remote antiquity.

The sacrificing of mullets upon these sacred occasions; the ablutions in the sea; and the offerings of sesamum and salt, might not have been more than mere ceremonials; or parts of the mysterious masking: They are not unsusceptive however of astronomical reference—if it were worth while to pursue those smaller matters which do not seem

* Some antique sacred vases of bronze from that country, were in the year 1821 consigned for sale to Mr. Christie; where the groups of stars were thus represented; and which were in other respects exceedingly curious.

† Essays on the Institutions, Governments, and Manners of the States of Ancient Greece, p. 39, edit. 1819.

to reach "the height of my great argument." The same holy baskets which contained the sesamum and salt, contained also—or were supposed to contain—serpents and pomegranates, which were unquestionable and important Sabæan symbols:—the former, of the paths through the heavens of the Sun and Moon; the latter (being an orb surmounted by an asterisk) of the annual conjunction of the greater luminary, with Jupiter, probably, or with Aldebarân.—In short, my opinions of these mystic ceremonies, although not the same with those which Dr. Hill has been led to infer, are perfectly compatible therewith, while they more satisfactorily account for the hierophant or officiating priest, being alternately considered by the initiated, as a "type of the Sun, of the Moon, and of Mercury."

If the secrets of the Mysteries were astronomical; or were so even in part—the same religious dread which would account for their being so rarely—if ever—divulged; accounts also for the little that has been directly imparted, and the much that has been withheld, of ancient astronomy. Æschylus occasionally deals in astronomical notices: blending with them the sacred charm and elevated pathos of his poetry; and it is known that Æschylus would have been in danger of capital punishment for revealing the mysteries, had he not been able to prove to the satisfaction of the Areopagus, that he never was initiated.

Again, why is Herodotus so chary and so vague in his astronomical notices, when treating of the ancient Sabæan nations? Why so much free-masonry? Why, in mentioning the deified animals of Egypt, (which were of astronomic reference) does he fear to disclose the reasons of their being held sacred? Why put off his readers with, "If I were to explain these reasons, I should be led to the disclosure of those holy matters which I particularly wish to avoid, and which, but from necessity, I should not have discussed at all?"—What does he mean when he says "the Persians of later times" [than those when they began to sacrifice to the Sun, Moon, and Jove] "added *Urania* to the number of their deities, after the example of the ASSYRIANS and ARABIANS?" His translator and commentator (Mr. Beloe) is here evidently puzzled by the equivoque, or is very unreflecting, when he thinks to satisfy his readers by informing

them that Herodotus means by Urania, "not the Muse, but the Celestial Venus:" which, beside that it is the mere *derry down* of classic literature, *cannot be* the meaning of Herodotus; because in the very next sentence, he says that "*Mylitta* is the name of the Assyrian Venus" without seeming to imply the least consciousness of the existence of more than a single Venus.

As the objects of the adoration of the Persians have been much controverted, I shall here beg leave to add a word or two. It appears to me that, when Herodotus states that the Persians sacrificed to *Jove*, we must employ what strength of vision we may possess, in looking through the literary cloud which here presents itself, unto the clear cerulean vault; and through the irrelevance to Southern and Western Asia, of those poetical personifications of their deities, in which the Greeks so much delighted to indulge; and that we should understand, by *Jove*, the diurnal expanse of Heaven: (as indeed Herodotus somewhere explains :) When he informs us that "they added *Urania*," &c. we should in like manner, understand by that word the *nocturnal* heavens, or the study and worship of the constellations. This, however, was but a revival of a Persian religion of times much anterior to those of Herodotus.

Furthermore, and with more direct reference to the present occasion—in *Euterpe*, clxx. we read that "the Egyptians have at Sais, the tomb of a *certain personage* whom I do not think myself permitted to specify. It is behind the temple of *Minerva*"—so called by the Greeks, but in fact the temple of *Isis* (or *Nature*) where was the often-cited ænigmatical inscription, "*I am what was, and is, and is to come. No mortal hath yet unveiled me.*"—The tomb of that personage whom Herodotus did not think himself permitted to name, he says, "is behind the temple of this Goddess, and is continued the whole length of the wall of that building. Around it are many large obelisks, near which is a lake of a circular form. Upon this lake are represented by night the accidents which happened to him whom I dare not name. The Egyptians call them *their mysteries*. Concerning these, at the same time that I confess myself sufficiently informed, I feel myself compelled to be silent.—Of the ceremonies also, in honour of *Ceres*," (the prototype of the Eleusinian mysteries)

"I may not venture to speak, further than the obligations of religion will allow me."—Thus far the initiated Grecian.

Were these accidents that were represented on the lake by night, the leading events of the Deluge? and were they part of the Osirian rites? I cannot tell. Perhaps it can now only be the subject of conjecture; but—we may be quite certain that if the mysteries were astronomical, or were so in any degree, we can obtain no voluntary information respecting them from Herodotus.

Returning to these mysteries, and to the Egyptian legend of the bearer of the van and pastoral staff, as they have been treated of by others, I have pleasure in noticing a further concordance between the results of my own researches, and those of Dr. Hill of St. Andrews; according to whom, the initiated were taught, that among the objects of their pious reverence, were "men, who having been the authors of some useful invention, or having rendered some signal service to their fellow creatures, had after death been celebrated by the poets [who were also the astronomical prophets] as superior to humanity." The general result of an investigation carried on in my last Essay, when combined with the revelation in the present afforded by the ancient annual descension of the stars of the Husbandman, could not have been more exactly expressed. And I think there is further evident connexion between what we know of the creed of the patriarchs—both ante-diluvian, and post-diluvian—and the following, which is the principal and concluding passage of the explanatory part of Dr. Hill's Essay: "The hierophant then taught them, that there was one supreme cause of all, alike free from imperfection and change; who by his providence regulated the course of events, throughout the Universe."

The aggregate of the festivals of the Husbandman, afford moreover, a pertinent and important instance of the ancient and popular mistaking of a mystic sign, for a cause signified. The constellation of Osiris (so to call it) was the concomitant sign only, of that annually returning season when Nature mourned. It took place, as the classical writers have agreed; and as any person having a celestial globe with slight knowledge of its uses, may easily convince himself, between the ancient winter sol-

stice and the vernal equinox, when terrene nature, or Isis, annually droops, or mourns; and it ended with the rejoicings that were consequent to the reappearance of those stars of genial abundance, which are about the head of the zodiacal Bull, and of which Al-debarân is the chief. Terrene nature;—physical, earthly, existence; that which *Is*;—that which, according to Plutarch, was originally sculptured over the entrance of the Delphic temple,—that mystic syllable which is twice repeated in the proper name of the great Goddess of Egypt; that awful I AM,* perhaps, which

* Soame Jenyns has treated this extraordinary mystic phrase, with considerable penetration; for which see the 4th volume of his "*Evidences*," &c.: but, granting him his position, that *existence is successive*; its principles are permanent. Compare the *I am* of Exodus, ch. iii. with the following in ch. vi. "and *Elohim* spake unto Moses, and said unto him, I am *Jehovah*; and appeared unto Abraham, unto Isaac, and unto Jacob, by the name of El-Shadai, but by my name *Jehovah* was I not known unto them."

But Mr. Knight's elucidation—although not written ostensibly in explanation of the mystic *I am*, is yet more satisfactory, and is particularly illustrative of our Sabæan view of the subject; since it shews the relations which were supposed to subsist between Existence; the Great Cause of all, or soul of existence; and the movements of the celestial phenomena; and develops—as far as human philosophy has yet been permitted to reach,—the mysterious connexion between physics and metaphysics. He says (in ch. 78, 79, of his learned *Inquiry*) "The great active principle of the Universe, though personified by the poets, and dressed out with all the variable attributes of human nature, was supposed by the mystic theologists to act by the permanent laws of pre-established rule; and not by the fluctuating impulses of any thing analogous to the human will; the very exertion of which appeared to them to imply a sort of mutability of intention, that could only arise from new ideas and new sentiments, both equally incompatible with a mind infinite in its powers of action and perception: for to such a mind, those events which happened yesterday, and those which are to happen during the immeasurable flux of time, are equally present, and its will is necessarily *THAT WHICH IS*, because *all that is* arose from its will. The act that gave existence, gave all the consequences and effects of existence, which are therefore all equally dependent upon the first cause; and how remote soever from it, still connected with it by a regular and indissoluble chain of gradation: so that the movements of the great luminaries of heaven and those of the smallest reptiles that elude the sight, have some mutual relation to each other, as being alike integral parts of one great whole."

"As the general movement of this great whole, was supposed to be derived from the first divine impulse which it received when constructed; so the particular movements of each subordinate part, were supposed to be derived from the first impulse which each received upon entering the world: for as every subsequent event was produced by some preceding one, all were really produced by the first. The moment therefore of every man's birth, being supposed to determine every circumstance of his life, it was only necessary to find out in what mode the

Moses adored at the foot of Horeb, whilst studying under Jethro, the priest of Midian, and before his devotions were turned toward Jehovah—NATURE, I beg to repeat—annually mourned—as she still mourns—this languishing season of the year; this desolate depth of winter, when vegetation perishes. It is the stormy season, when Typhon rages. The stellated Husbandman—the first cultivator of the vine—the knowledge of which, with the art of expressing and fermenting its generous juice, De Pauw affirms to have been first brought from Æthiopia to Egypt)—He whose stars arose in the East, immediately after Vindemiatrix* or the vintage star, and as if under the genial influence of its rays—After his annual career of prosperity: after revelling orientally for a quarter of a year and attaining his meridian altitude with Virgo—as the stars of the Water-urn rise, and Aquarius begins to pour forth his annual deluge—declines to the Westward preceded by the stars of Ursa Major, or the Ark of Osiris. Orientally, the Husbandman was the sign, though not the cause, of that happiness, in which Nature—the great Goddess of passive production—rejoiced: He is now in the occidental quarter of the heavens, which is the place, as it marks the season, of comparative regret; (and hence perhaps, his attractive and repulsive emblematical accompaniments):—Generative vigour, as he declines towards the North-western horizon, is gradually abated:—The Solar Year grows old. And, as his stars descend beneath the Western wave, Osiris dies.

During the whole of his celestial course, we have seen that this constellation is no other, and no more, than the concomitant nocturnal sign, of changes, of which the Sun—the prime agent of Providence—may be regarded as the physical cause. Can we wonder that superstitious ig-

celestial bodies, supposed to be the primary wheels of the universal machine, operated at that moment, in order to discover all that would happen to him afterwards.”—Hence the great number, and the high importance, of the Sabæan horoscopes—But all comment on a philosophical developement, so comprehensive, pertinent, and exactly just, would be at once presumptuous, and superfluous.

* Here is a fresh gleam of sidereal light. The vintage star must have thrown its rays on the constellated vine, in the view of those who regulated their science and its symbols by the Egyptian planispheres of the second Hermes (of which I have already treated) where a vine circumscribed the stars of the Husbandman.

norance, or even such literary tyros in science as Diodorus—should confound the Sun with Osiris?*. Can we be surprised that the rites of the latter should vary in regard to time with differences of latitude? Or that the hierophants should exclaim at the close of their sacred ceremonies, “We have found him” (the supposed lost Osiris) “*concealed in the embraces of the Sun?*”—esoterically meaning by this, that they had found the principle of the re-invigoration of productive causation.

This re-invigorating principle, was also found—zodiacally speaking, and as before intimated—to be stationed in the *head* of the *Bull*. Now, Plutarch informs us that *Serapis* was the name by which Osiris was called, after he had changed his nature, or had descended to the *infernal regions*—which is now understood to mean the *nether hemisphere*: The two latter syllables of this word—namely *Apis*—appears to be a direct allusion to the celestial Bull, the more ancient reputed station of genial effluence, throughout all the nations of the East. Whether the first syllable be (as a learned doctor supposes) the radix of Osiris, I cannot tell: After offering a thought or two on the occasion, I must leave it to the scholars; who I believe have not yet settled whether the initial syllable of the Taurine deity of Egypt, should be written and pronounced *Ser*, *Sar*, or *Sir*.

But probably all of these may have been locally right in different parts of Egypt, when this deity was in his glory. Indeed we can hardly suppose that in those early ages, enunciation and orthography were more

* I have ventured to speak here of an ancient mistake, into which many of the moderns have also been led—chiefly perhaps by the inadvertency of Diodorus. Among them is the justly celebrated Cambridge professor of Astronomy, Dr. Long; who writes, “The Egyptians worshipped the heavenly bodies, but especially the Sun and Moon, which they called their great Gods: They thought the Sun [*whom they called Osiris*] a proper representative of the Spirit of Nature, or the Soul of the World, or the Supreme Being, who is every where present, exercising his power over every part of the universe. The Moon, as she receives her light from the Sun, was looked upon as a female and called Isis, which goddess is sometimes made to signify universal material nature considered as passive and susceptible of various impressions, forms, and qualities.”—The whole of this passage from ch. 2 of Long’s *Astronomy*, is extremely pertinent, excepting the mistake, which I have judged it proper to place between two *keepers*, as a departure from reason and truth, worthy of being watched, if not of permanent confinement.

settled than this degree of resemblance amounts to: and notwithstanding that the argument here, is concerning a *word*, I rely on sculpture for the chief proof of what I shall venture to add—namely: That all the above are from the same Oriental etymon with the Chaldean word *Saros*—or, perhaps—(regarding the word, as it has reached us through the channel of the Hebrew language, שָׂר, (*Sar*.)—for the termination appears to have been added by its Greek transmitters.

Now this word, which probably belonged to the primitive, or parent, language of the East, when written without the vowel points, might be variously pronounced *Ser*, *Sar*, or *Sir*; and it literally means—according to Parkhurst, to regulate, direct, and rule; or to be made straight: Costard (who must be confessed to be inferior authority upon such a point) says it means *initium*, or commencement: and Julius Bate says, a director or ruler. Either, or all, of these senses, apply in the present case: * *Sir*, *Sar*, or *Ser-Apis*, is the Bull of *commencement*, or of *regulation*; or he is the *ruler*, (of the cycle at present under our notice;) or he makes *straight*—that is, brings the stars in question to the same meridian at the recommencement of the cycle.

I am supposing this *Saros* to have been one of the astronomical cycles of Egypt, as well as of Chaldea. Costard thinks it is the same with the Plinian period, and the Metonic† cycle. Perhaps it was known throughout Chaldean Arabia, Egypt and Greece, as a returning epocha of cardinal importance, when the popular lunar zodiac tallied with the real nightly mansions of the moon: a recurrence of peculiar sacredness among the star-worshippers, on which we have already bestowed some attention, and of which I shall treat more particularly in a subsequent discourse.

At the close of this period (of eighteen years and a fraction), it would appear that the sacred *Apis* was put to death by the Egyptian priests, and inhumed with considerable and imposing ceremony; and

* Some other meanings are annexed to this word by the lexicographers, Parkhurst and Bate. And among those which are supposed to have grown from this ancient root, are the modern *measure*, *mensurate*, *Sir*, *Sieur*, *Sire*, and *Series*.

† It consists of 123 lunations, and has been much esteemed by some modern astronomers, amongst whom is Dr. Halley.

that his successor—whom heaven had been pleased miraculously to honour, or the priests to impress, with those circular and crescent-formed spots, which were esteemed to be the criteria of holy incarnation—was installed with due appearance of piety.

We may now pursue the thread of our main purpose, (which in this place, was to explain those analogies of the mystic legend that were of annual recurrence,) perhaps with some fresh advantage.—In the treatise of Plutarch, we read that Horus, [the vernal Sun, or productive energy of the new year,] displeased with Isis, [Nature,] for setting Typhon [destructive power,] at liberty, after Isis and Horus had conquered him,—tore off his mother's diadem: but that Hermes [the thrice-great Egyptian astronomer, and subsequent God of signs] stepped in, and to heal the breach, placed on the head of Isis, a helm in the shape of the head of an Ox.

Thus far Plutarch. Now, what could be the crown of terrene nature, but the fruits—the produce of the year? What could mean the superinduced Bull's head, but productive energy renovated, and reappearing by its sign, in the head of the Zodiacal Bull? What can we understand by Nature setting destructive power at liberty, but that periodical change which takes place as the solar year declines? And what does the symbolical series form, but the annual system of the revolution of the Seasons?

The harmonious analogies of Nature, and the sublime science of Astronomy, have blended their divine influence in binding together the incidents of this annual Egyptian drama. Plutarch further mentions that the Egyptian adepts were accustomed occasionally to cover the statues of Osiris with a flame-coloured veil, which is precisely consistent with the rest of the allegory: for—what were the occasions?—The veiling took place soon after the Summer Solstice, when the sign Osiris again rose with the Sun. The flame-colour, was therefore an obvious allusion to the genial light and warmth of the solar radiance, which now veiled at their morning rising, the stars of the Husbandman.

Upon several minor and homogeneous matters, which would go to the support of my explication, I have for the present, forbore to touch, lest they should prove tedious to those who are less deeply interested in these matters than myself; but there is one strongly presumptive argument of a general nature, which might be used against the tenor of my interpretation, and which it would be both unwise and uncandid to let pass.

It might be held—even by those who may grant deficiency of astronomical science on the parts of Diodorus Siculus, and Plutarch—to be nearly impossible that the constellated Husbandman of Assyria, Egypt, and Æthiopia, could have been the Bacchus of Greece and Rome, without some uninitiated classical writer or other, being astronomer enough and mythologist enough to know it, and honest enough to have told it in his writings: or without some initiated writer letting the indications of that mythological fact escape him.

This might be urged, and I confess certain misgivings on this score, and acknowledge that they have had no inconsiderable influence in holding back for awhile, my faith in my own discovery. Yet, on the other hand, of all species of ancient facts, the present was the most likely to have eluded record, fenced about as it was by creeds of mysticism: and it would be over scrupulous not to suppose it possible for modern research to redeem or recover any of those fragments of wreck that float on the ocean of time, now hidden by its undulations, and anon distantly and partially visible.

Enough of misgiving remained however, to put me upon asking myself certain examinatory questions, and upon extending my researches accordingly. Among these questions were, whether unnoticed mentions of, or allusions to, the stellated Bacchus, might not have escaped the mythological antiquaries? And, which were the classical writers, whose works have come down to us, whose subjects would have led them to treat of these matters, and who were at the same time not sworn repositories of the ancient mythological freemasonry? My responses were essentially as follow:—

I thought Virgil must have been of the number of the initiated: I

thought him notwithstanding, far more likely than most others, to have touched the true chord, and that an intent listener was not unlikely to discover symphonious melodies, at least, amongst those Eclogues and Georgics, where he treats of Astronomy with such evident mastery of the science.

Now then—supposing myself to be honoured with the reader's company, let us see.—“The fan (or winnow) of Bacchus,” is mentioned in the 1st Georgic, v. 247 of Dryden's translation: and in v. 319, &c. we meet with,

“Begin when the slow *waggoner* descends,
Nor cease your sowing till mid-winter ends.”

Does this allude to Boötes? No: for in v. 335, &c. both the *Bears* are specifically alluded to as follows,

“Around our pole, the spiry Dragon glides,
And like a winding stream the Bears divides:
The less and greater, who by Fate's decree,
Abhor to dive.”——

On the planispheres where *two* Bears appear, there could be no northern waggon; and therefore, no *waggoner*. The Waggoner meant by Virgil in this place must be Auriga, the season of whose acronical setting agrees with the agricultural precept which he here lays down concerning the sowing of grain. This is a minor point, certainly; but, it may conduce to a clear view of the question, to shew where the poet does *not* mean the stars of Bacchus, since it increases our conviction of his meaning in other places. And in the opening of the Poem, v. 7—9, BACCHUS is especially invoked (together with Ceres)—

“Ye Deities! who fields and plains protect,
Who rule the seasons and the Year direct:
Bacchus and fostering Ceres”——

But this rendering, although pertinent to our occasion, is not quite correct. The original is,

——— “Vos, O clarissima mundi
Lumina, labentem, cœlo quæ ducitis annum,
Liber et alma Ceres.”———

Which I beg to submit would be more correctly translated by, *You, O brightest luminaries of the World, Bacchus and Ceres! who in heaven lead the declining Year!*

Indeed Mr. Granville Penn, who in his erudite and judicious "Observations in illustration of Virgil's 4th Eclogue,"* has occasion for a correct rendering of the verses, has translated the last of them still more exactly to our purpose—He writes, "Ye *Stars* who govern the declining Year,"—Not that it is material: since by bright luminaries, who in heaven lead the declining year, stars must necessarily be meant, and it follows to logical demonstration, that Virgil believed in a constellated Ceres and Bacchus.

I have the honour of quite agreeing with Mr. Penn and his cited authorities, that the stars of Virgo, were sacred to Ceres. Indeed some astronomical writers identify Virgo with Ceres,† and none dispute that she is "*signum Cereris*." But I venture to think that had that gentleman recollected, or been aware of the existence of the constellated cultivator of the vine; and had he known, or perceived, how homogeneous and pertinent to his own conclusions with regard to the true meaning of the Mantuan bard, were the transits or descensions of the stars of that constellation, I have the further pleasure to think that on this point also, there would have been no difference between us: I persuade myself that he would have given honour due to the stars of Bacchus—the first cultivator of the vine—sometimes celestially depicted‡ as the vine itself,—and would not have claimed that honour for those of Libra.

Had Virgil understood, and had he meant to imply, that Bacchus was the tutelary Deity of the stars of Libra, the probability is that somewhere among the several places wherein he has mentioned that sign, he would have informed us of this connexion; but, not only has he not done this, but I believe that no other ancient writer has done it; and the Roman name of *Vindemiatrix*, or the vintage-star, we may be very certain would

* Printed for W. Miller and R. H. Evans, London, 1810.

† Among them are Dr. John Hill in his *Urania*, and Mr. A. Jamieson in his *Celestial Atlas*. The latter says, "the usual symbol of this portion of the Zodiac is a damsel whom popular belief in Greece represented as Ceres with ears of corn in her hand."

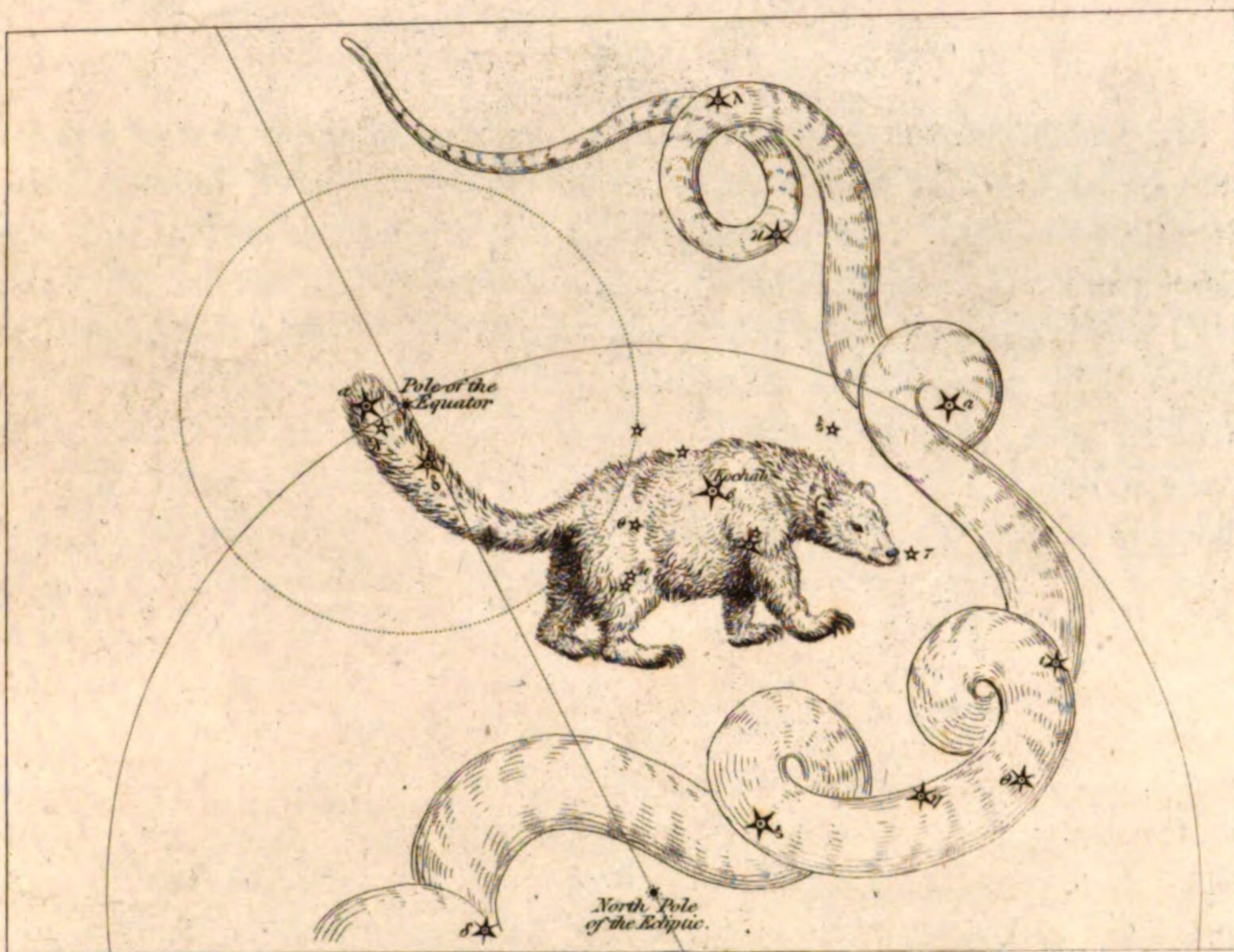
‡ As before noticed, in the Egyptian planisphere brought forward by Kircher as being that of the second Hermes.

not have been conferred on a star of Virgo, had the stars of Libra been regarded as those of Bacchus.

But a reference to my newly-mounted globe, of which I shall here set down the results, will probably supersede all further argument concerning the matter.—About the epocha of the Augustan age, the westernmost stars of Pisces were beginning to be the place of the vernal equinox; those of Gemini that of the Summer Solstice: and the Arctic pole was near a small star now engaged in the head of Cameleopardalus. Elevating the pole nearly to 42° North, which, being the latitude of the Campania of Rome, we may suppose to have been that in the contemplation of the poet—if we bring the stars in question to the Eastern horizon, what are the phenomena that present themselves?—The earliest star of *Virgo* (whom it may be as well to call *Ceres* in this place) is rising simultaneously with the *Ras*—the principal star of Boötes (or Bacchus) when Arcturus is kept out of the question; and the star *Vindemiatrix* ascends precisely with *Al-katurops*. Bacchus being in fact the chief northern paranatellon of Ceres.

When they “lead the declining year”—that is to say, when the stars of Ceres and Bacchus set heliacally—*Vindemiatrix* descends about the same distance of time after *Spica*, that the Italian vintage is in succeeding to the wheat-harvest; and sets the very last of the stars of Ceres excepting a very small one (of the 5th or 6th magnitude) in her hand; and these immediately precede the setting of the stars of Bacchus: the Sun being at the time in Libra, and of course the season just after the autumnal equinox.—So that Virgil’s apostrophe to the stars of Ceres and Bacchus, as *bright luminaries who in heaven lead the declining Year*, is not less astronomically correct, than it is harmonious and poetic. I shall here beg leave to close this argument.—I thought to have also adverted to Eusebius, who, as I am informed, has mentioned his belief that the constellation Boötes is the Osiris of Egypt: but the day is really too far spent. I must content myself for the present with this brief mention. *The succession of the Pole Stars* appears to have more powerful claims on our attention: but even this I must postpone for awhile.

With that high degree of respect, which I have long felt and cherished for the mild virtues of your Lordship, I have the honour to remain, &c. &c.



TO ILLUSTRATE THE MOVEMENT OF THE N. POLE, & SUCCESSION OF THE POLE-STARS.

P.S. THESE Sabæan hieroglyphics are a sort of Gotham of my own:— a new discovered country which has formerly been inhabited; but of which the roads are overgrown, and of which there exists no better than a rude and half obliterated map. I did not therefore choose to impede the progress, or retard the survey, we were making, by stopping to dwell upon the history of the arctic circles, and the succession of the pole-stars: yet some such sojournment, or something to answer the same end, seems necessary to a clear understanding of that part of our subject. I hope therefore that this succedaneum will be found acceptable in the form of a Postscriptum, or Appendix.

Beside that our purpose is scientific and explanatory; or rather, is explanation through the means of science, to which a certain degree of correctness is essential; this part of the history of the Heavens is highly interesting in itself. With the view of clearing up this matter, then, your Lordship and my other readers will allow me to return to our learned countryman's Asiatic researches.

Mr. Colebrooke says, "I shall here remark that the notion of a polar star, common to the Indian and Grecian celestial spheres, implies considerable antiquity. It cannot have been taken from our present pole-star (*a ursæ minoris*), which as Mons. Bailly has observed, (*Astron. Ancienne*, 511) was remote from the pole when Eudoxus described the sphere; at which time, according to the quotation of Hipparchus, there was a star situated at the pole of the *world*. Bailly conjectures, as the intermediate stars (of the 6th magnitude,) are too small to have designated the pole, that the *Kappa Draconis* was the star meant by Eudoxus, which had been at its greatest approximation to the pole, (little more than 4° from it) about 1236 B. C. It must have been distant between seven and eight degrees of a great circle, when Eudoxus wrote. *Possibly the great star in the Dragon*, which is situated very near to the circle described by the north pole round the pole of the ecliptic, had been previously designated as the polar-star. It was within one degree of the north pole about 2836* B. C.—As we know that the idea could not be taken from the star in the tail of Ursa-minor, we are forced to choose between Bailly's conjecture, or [and] the supposition of a still greater antiquity. I should therefore be inclined to extend to the Indian sphere, his conjecture respecting that of Eudoxus."†

But are we indeed thus forced, and thus restricted in our election?—Looking at the sphere itself, I may be permitted to ask, how came M. Bailly and Mr. Colebrooke to overlook—at least to omit publicly to notice—the *Beta Ursa Minoris*? It is a larger and brighter star than the *Kappa Draconis*, and is equally near to the circle described by the pole of the Equator (or of the world, as it is termed by Mr. Colebrooke) round that of the Ecliptic. There was moreover an unformed star of the fourth magnitude—that is to say, a star which stands detached from all constellations, just above the back of the lesser Bear, and marked with a Roman *a* in the modern catalogues.—In fact there are three stars above the back of Ursa Minor, which must all have been near, and the southwesternmost of them very near, the polar point during the

* I reckon it to have been at its nearest approximation about 3000 years B.C.

† Asiatic Researches, vol. ix. p. 329.

period when the solstice passed through the middle degrees of Leo: but, the *Beta* of Ursa Minor, being of the third magnitude, and still belonging to that constellated Bear by which the earliest navigators are recorded to have fearlessly steered; and the most ancient caravans to have nocturnally traversed with equal confidence, the torrid deserts of Arabia*—I should suppose must then have been denominated the star of the arctic pole; and perhaps may be the same that was once called by the Greeks *Phænice*.

A stronger argument remains. The *Beta Ursa-minoris* happens to be one of those stars which still bear names that were originally derived from the ancient astronomy of Arabia; and many of these old Arabic names, are still radiant with the star-light of antiquity. They remind us of that sublime passage of Addison, wherein he suggests of the stars whose distances surpass human mensuration and the powers of human vision, that their light—with all the native velocity of that fluid—may have been travelling toward our planet ever since the era of creation.

The ancient light of the star in question (if our metaphor be duly furnished with *legs*) we must suppose to have just arrived at our ocular sense. The star is marked on the modern globes, *Kochab*. What is the literal meaning of that word?"

Dr. Hill, in the "*Urania*," which he has dedicated to your Lordship's noble and much honoured ancestor, says that *Kochab-zedec* means, Star of Justice: Sherborn says, that *Cocab Shemali* means, Star of the North. *Kochab* then, should mean *star*; or emphatically *the star* (as we might now call the Pole-star, the star of stars.)—On the other hand Mr. A. Jamieson, treating of this very star in his *Celestial Atlas*, affirms that the word *Kochab* is from the Arabic *Kutab*, a hinge or axle. As I am no Arabic scholar, I cannot determine between these authorities. I want here the Oriental learning of my friend Lockett. I should suppose, however, that an astronomical scholar of Jamieson's pretension, would

* The Koran, Sur. vi. ver. 98, says, "God hath given you the Stars to be your guides in the dark, both by land and sea." And Diodorus, who is believed to have transcribed from Agatharcides, writes, "The Southern parts of Arabia are made up of sandy plains of a prodigious extent; the travellers through which, direct their courses by the Bears, in the same manner as is done at sea."

take care to be in the right upon such an occasion, and the preponderance of plain sense and meaning is clearly on his side. But there may possibly be no contradiction here; for while *Kutab* may mean hinge or axle, *Kochab* may mean star; either or both of which are applicable.

Be these matters as they may, here appears a plain indication that the Kochab of the modern sphere, was once the Pole-star of the Arabian astronomy; for there must have been some especial reason for calling the Beta Ursa minoris, either the hinge or axle, or emphatically, the Star; and none other presents itself. The *hinge* or *axle* is indeed precisely in point; either being more pertinently expressive of what is meant, than our modern term *pole*. Of what else than the diurnal revolutions of this globe, could this star have been the supposed hinge or axle?—The name *Kochab* establishes (I think) the superior claims of the star which bears it, to those of the Kappa Draconis; for independently of its equal proximity to the circular path of the pole of the Equator, and of its being a larger and brighter star; if we understand by this Arabic word, *the Star*, we are necessarily conducted to this conclusion; while if we understand by it the hinge or axle, we are led to the same conclusion with yet greater readiness and certainty. On the whole, I submit, my Lord, that we may safely *believe* that the Beta Ursa-minoris, was certainly regarded as the ancient northern termination of the axis of the equator—Not so early, of course, as the Alpha Draconis, nor even as the era of the first institution of the rites of Osiris; but, at the time quoted by Mr. Colebrooke from Eudoxus, and for some centuries before and after.

It is partly with the view, and for the sake, of assisting the superior astronomical claims (as they appear to me) of the Arabian Æthiopia—of that country which conferred on *Kochab*, *Aldebaran*, and *Dubhe*,* their ancient denominations; that I have gone into this investigation of the

* The star Dubhe—the *Alpha* of Ursa-majoris, obtained its Arab name, at the same time and under the same circumstances with Kochab: for *Dubhe* means *Guide*, (I believe it also means *Bear*) and the colure of the summer solstice passing exactly through it when Kochab was the Pole-star, it became the guide of ordinary observers, through whose agency the true pole-star (as well as the place of the colure,) was known, as *the pointers* are the guide at present—the Beta Ursa-majoris, having subsequently been associated with the *Alpha* for that purpose, and under that designation.

names and places of the Pole-stars prior to the formation of the Grecian sphere; for in point of fact, the real place of the North pole, at the distant epocha which we are now contemplating, was the same, whether we regard the Kappa Draconis, or the Beta Ursa-minoris, as the Polar star: that is to say, the circle described by the pole of the equator round that of the ecliptic, passed so exactly between these stars, that a twelve inch globe does not enable one to pronounce either to have been the nearest to the periphery of that circle. These ancient Arabian names, however, being words of previous meaning, may be thought to have some weight, when combined with the passages (cited in the above Essay, and which I hope the reader has not forgotten) from Strabo and Theophrastus, in favour of the claims of the Oriental or Arabian Saba. The claims of the two Sabas, are like those of the two stars, and we are here glad of a ray of auxiliary light from the ancient language of Arabia.

There has been then, according to the above premises, a succession of at least three pole-stars, since the epocha which is generally regarded as that of the Creation: the first having been the Alpha Draconis; the second Kochab, or the Beta Ursa-minoris; and the third Cynosura, or the Alpha Ursa-minoris—our present Pole-star: for whatever stars are situated in or near $66^{\circ}.33'.N.$ a parallel which marks the space between the celestial and the terrestrial poles, will in succession become polar stars.

The Etching which is placed at the head of the present appendix, and a few remarks on it, will explain this. It is known among Astronomers, that what is termed the precession of the equinoxes, is in reality—or rather is caused by—a gradual motion of the pole of the Equator (or terrestrial pole) round that of the Ecliptic, (or axis upon which the celestial phenomena revolves,) which motion is so exceedingly slow, that it has not yet advanced much more than through three of the twelve Zodiacal signs, since the presumed era of Creation: and in these high northern regions of the sphere the degrees of longitude are so considerably lessened, that it has been found eligible to measure its progress on the Ecliptic. Even there it amounts to no more than a single degree in seventy-two years.

As the pole of the equator slowly moved along the periphery of this circle—where it has ever been moving—it arrived about sixty-four centuries ago, near the Alpha Draconis—within about the same distance

that it is at present from Cynosura:—I was about to write that then commenced the polar reign of the Alpha Draconis; but it must have *commenced*—if we could suppose that astronomy was known and a Pole-star was recognized, from at least eighteen centuries before—if this planet were then in being: for there is no star further back in the circle, till we arrive at the *iota* Draconis. Beyond the *alpha* Draconis it might therefore be thought idle to speculate.

When the pole had advanced from wherever was its starting point, along the arc or verge of this important circle, till it came to be nearer to Kochab and the *kappa* Draconis, than to the *alpha*; one of these (Kochab as I have supposed) must have succeeded to the dignity of the Arctic star; and again, before it arrived at its present place, a star of the fifth magnitude in the head of the modern Cameleopardalus, might for a while, have enjoyed the honours of the pole-star,—if stars so small could be supposed to have been successful candidates for an honour so great.

The stars, though their motions be held together by the strictest geometrical science, have been, as is well known, the subject, or vehicle, of much poetic fiction; and of some fiction which is not at all poetic. Has the mind of man been too restless to be satisfied with constantly contemplating what was indubitably true and always the same,—unless some *fable* were engrafted on it?—And must Astronomy seek to *divert* it?—Or has she been pressed into a paltry service?—This curve in the Heavens, at the extremity of the axis of the Earth, is the scythe of Time: All things have been mown down by it. At least the analogy which would support this new reading of an old legendary fable, is much more simple and credible than many which have been treasured up in mythologies; often repeated; and honoured by some with the appellation of “the poetry of the skies.”—Poetry of the skies! Some trivial matters that deserved not to be remembered for a moment, have here been *eternized*!—Every presuming fool and half-witted flatterer who pleased, has been permitted to “touch with his partisan,” these celestial matters. Who should have cared about Arcas and Calisto; or the Brandenburg sceptre; or the Fox and Goose?—Science might blush for this. The truths of Astronomy, are of all truths the most lasting and sublime. “We do it wrong—being so majestic, to offer it the shew of—levity.”



ESSAY VII. TO THE R^T. HON. EARL SPENCER, K.G. F.R.S. & F.S.A. TRUSTEE OF THE BRIT. MUS. PRES. OF THE ROYAL INSTITUTION, &c. &c. &c.

MY LORD—It had been scarcely pardonable in me to have let pass the present opportunity of dedicating part at least of my Sabæan researches, to a Nobleman so distinguished as Earl Spencer for his love of the Sciences and Fine Arts; and for the deep interest he has taken in what respects the antiquities of art, literature, and science.

As your Lordship so honourably presides over that Royal Institution for whose meridian the present paper was calculated, I have fancied that you would be quite as well pleased to see it in its original shape of a **Lecture**—or perhaps better pleased, than if I had attempted to re-cast its substance in a more epistolary form.—Retaining this its original shape, I therefore simply do myself the honour of inscribing it with the respected name of your Lordship, while I shew those who did me the pleasure of attending in the Lecture-room, what I had prepared for them, had it con-

sisted with the arrangements of the last season, for me to have delivered another Discourse.

FROM certain questions which have been put to me, with reference to the manner in which these Lectures have been announced, I am led to perceive that more has been expected—more diversity perhaps—at least by some of my auditors—than has been exhibited, concerning **HIEROGLYPHICS**—a term compounded of two Greek words denoting *sacred*, and *on stone*; and more especially concerning those Hieroglyphics which every body has seen; of which our Egyptian travellers have brought home so many; and which all of us so naturally wish to be able to decypher.

But, fair and softly, my friends. No rapid advances can be made in this direction: The obstacles are too many; and there is no royal road.

The public curiosity—the wish to lift these veils of awful wonder—is not less laudable than strong: but it can only be accomplished by dint of gradual care and persevering circumspection. My prospectus may have been too promising; or too comprehensive. Egypt has been mentioned in it; and as Egypt is the country of all others, where hieroglyphical inscriptions abound, I willingly allowed my thoughts to turn from the constellated Husbandman of Chaldea, to his foreign counterpart or representative, the Osiris of Egypt—which may be figuratively termed the *Aleph* of the sacred characters of that ancient and mysterious country.

Of the discourse of this morning, I mean to devote the earlier part to an investigation and disclosure of the meaning and use of the Aleph of the star-worshipping nations—speaking of them collectively: In other words, to a revelation of the *leading* astral and conventional sign of the commencement of the annually revolving seasons, and of the ancient astronomical cycles, and its corresponding hieroglyphical symbol: to be followed in my next Lecture with a detailed account and exhibition of one of that species of Sabæan signet, distinct from the horoscopical signets of individuals, and intimately connected with those revolving seasons, which has been already alluded to [in my 4th Essay], and with which my present

course must close: affording—as far as Time has permitted me to proceed—what I may perhaps be allowed to term a systematic, or correlative, view of the elements of my subject, and a taste of its cream variously flavoured: By which I mean that I shall have produced—with examples of the Sabæan signets—detailed explanations of the two distinct kinds which I have traced; one being of Babylon and horoscopical; and the other from the land of Canaan, and referring to an annual Solar festival.—I shall have exhibited also, as far as my means and present opportunity furnish—explanations of the *leading* hieroglyphics of Sabæanism in general, and of Egypt in particular; and thus (to the best of my ability) shall have redeemed my pledge, by having treated of “the hieroglyphics of *Chaldea, Egypt, and Canaan.*”

By the *Aleph* of the Sabæan nations in general, I mean that primordial and frequently recurring, crescent and disc, of which I have already spoken, but I think not sufficiently; which appeared first (or in the oldest monuments) on the forehead of the celestial Taurus; at subsequent periods on his neck, and back; and finally between the horns of Aries.

I am far from meaning that the Sabæan bulls, with the discs over their foreheads, *all* belong to the remote era when the year opened with the heliacal rising of the stars of Taurus.* What I meant to affirm in a former Lecture, was that the oldest sculptured monuments that are now extant, do not carry us further back into the depths of time: or, in other words, we have yet met with no antiques where the celestial *Twins* are accompanied by this symbol of a commencing cycle, or by any thing else which can be construed to bear a similar meaning.

A repetition of this symbolical meaning, may not be useless in the way of defining and fixing it clearly in our memory. The crescent and disc, when combined as above, always means the conjunctive Sun and Moon; and when placed on the head of the zodiacal Bull, means the commencement of the cycle termed Saros by the Chaldeans; by the Greeks, *Metonic*; and supposed to be alluded to in the Hebrew or Arabian (scriptural)

* It is known that some of these orb and crescent crowned Tauri, are of subsequent date, and belong to a fictitious mode of estimating the commencement of the year according to a system which supposes the fixed stars to have moved.

phrase "Mazzaroth in its season;"—that is to say, the first new Moon, and new Sun, of the year. Occasionally—once in eighteen years and a fraction, respecting which astronomers are not exactly agreed—these are precisely coincident, and are always assumed to be so, when thus exhibited on the forehead of Taurus, for the sake of apparent precision—the differences when they are otherwise, being made up by intercalation; such exhibitions having been deemed necessary to the equation of solar, with lunar, time.

The next astronomical sculpture of the same *leading* character when thus accompanied by the lunar crescent and disc—That which succeeded the Bull, when it had become incontestably evident to all observers that the equinoctial colure no longer intersected the sign Taurus—is that of Baâl-Ammon; so termed in the scriptures:—the Jupiter-Ammon of the Greeks: but whether called more than simply Ammoun among the Egyptians,* where the ram-headed and orb-crowned figures most abound, I believe is not positively known: neither does this greatly signify: The thing, without the word, which we have; is far more satisfactory than would be the word without the thing.

But perhaps I should rather have written that such figures of Ammon are known to be extant: however, when this sentiment of *our possessing* examples of the orb-crested Ram, presented itself to my mind, I made it my business (that I might neither incur your blame nor my own) to apply again for admission to the small Egyptian-room at the British Museum, which is rich in bronzes, and other of the smaller sculptures of that interesting country: but unfortunately for my present pursuit, it is still closed, and is likely to remain so (as I am given to understand) for a period, the duration of which is too uncertain to be longer waited for. On the sarcophagus of Alexander, however—or that precious and wonderful work which has been so termed—the zodiacal Ram appears—(his head surmounted by the solar orb); the astronomical era of whose reign as a leading sign, agrees in time with the age of the Macedonian conqueror, and with the circumstance of his visit to the Lybian oracle of Ammon.

* "The Egyptians call Jupiter, Ammoun."—Beloe's *Herodotus*, *Euterpe*, xlii.

I shall now beg to recall your attention, as impressively as I may be able, to this important and frequently recurring symbol, as attached to the antique Rams and Bulls of the Sabæan astronomy; among other reasons—but chiefly—because in all retrospective chronological calculations, I conceive it to mark a cardinal point; I say a *cardinal* point; literally and emphatically so, because the points of intersection of the solstitial and equinoctial colures, were anciently termed (by Manilius and other classical writers on astronomy) the *hinges* of Heaven. Since no man has yet been able to read the minor hieroglyphics of Egypt, let us with the greater solicitude, ascertain and secure if we can, these cardinal points.

Inferences may sometimes be safely drawn from what is not, as well as from what is. As on the one hand the zodiacal Twins are never found with this significant accompaniment; so neither, on the other, are the zodiacal Fishes discovered to have been thus honoured, in Egypt, or in any other country: the reason of which is obvious, when we reflect that Egypt had passed under a foreign yoke, before the colure of the vernal equinox had removed to the sign Pisces. I entertain little doubt, that had the primitive government, and primitive sacred institutions, of Egypt, remained undisturbed, we should in like manner have beheld shrines, statues, and temples, erected to those holy Fishes whom the Solar God honoured with his presence at the commencement of the year, and of one of the sacred cycles of the Egyptian superstition: for I apprehend that the hieroglyphics which adorned their earlier religious edifices, were all connected by the same system of Astronomy.

This state of things was intercepted (as I conceive), if not by Persia, by the Macedonian conquest: and it appears to me as if from that era, and during the reigns of the Ptolemies, the Egyptian astronomers had felt the necessity of compromising some of their more ancient usages regarding the promulgation of the public calendar, in compliance with the prevailing customs of their Grecian masters, which were to reckon from the first new Moon after the Sun's arrival at the Summer solstice, or by that popular zodiac according to which the Bull ushered in the new year. I do not mean here that the Egyptians had absolutely changed their own modes

of reckoning time, but that they felt themselves obliged to admit and promulgate the Macedonian modes also.

I apprehend that the Babylonian and Persepolitan Tauri and Minotauri are all genuine: that is to say—they really belonged to the ancient period of Taurine splendour; but that a large proportion (perhaps) of those sacred Bulls of Egypt which have descended to us, and which are adorned with the crescent and disc, are comparatively modern; by which I mean that they belonged to those ages when the Ptolemies reigned there, and when the sacred Bulls of Greece—such as those two of bronze in Mr. Payne Knight's cabinet, and those two others in the British Museum—are found to be either adorned in the same manner; or have a hole pierced in the backs of their heads, for the occasional reception of the symbols before mentioned—one or both of them, according as Solar and Lunar time was, or was not, concurrent, and the Sun and Moon conjunctive.

And here I cannot pass without notice; yet that notice shall have strict reference to the hieroglyphic before us—the oblong zodiac of Dendera, where it is displayed in a very conspicuous and remarkable manner.

This monument, and another containing also a zodiac, from the same temple, which has lately been added to the antiquarian riches possessed by the city of Paris, have engaged the attention, and called forth the various degrees and modifications of critical acumen which they severally possess, of Fourrier, Denon, and other of those French savans who do themselves so much honour by their devotion to art, science, and antiquity; and in our own country, have excited those of the Rev. Mr. Henley, Mr. Hamilton, Mr. Bankes, and more recently of Sir William Drummond; and will, in all probability, continue to be the subject of antiquarian controversy for some time to come; for others, as I hear, are now busily employed in the critical investigation of these antiques: and doubtless there remains a great deal to discuss and discover, both in this oblong zodiac, and in the circular planisphere which is alluded to above, and which was sculptured on the ceiling of an upper apartment of the same temple.

The upward of 16,000 years of duration, which the French philosophers were at first disposed to claim for this zodiac, have been ably and firmly refused by the antiquarian critics of our own country; and first I believe by Mr. Henley, who brought M. Fourrier and his followers, to the dilemma of giving up their remote date, or of proving that 15,000 years before Christ, was the happiest (or most flourishing) period of the arts and sciences. I suppose this very ancient date is now entirely abandoned.

But yet Mr. Henley's own essay is a curious tissue of ingenuity and error—of learning and credulity. His mode of research consists by far too much of counting. He would enumerate almost every visible touch of the sculptor's chisel. He sees mystic design or moral intention in every petty detail—even the most minute. He is like a musical antiquary, who, finding the fiddle-stick's-end of some great performer of yore, would deduce the melodies of his music, from the number of horse-hairs it might be found to contain. Many of his observations notwithstanding, take a very learned character; and his reasons for assigning the zodiac of Dendera to the comparatively recent period of the Augustan age, are of some force: plausible, though not conclusive—However, I don't mean here to unroll a volume, nor to follow these scholars much further at present, than concerns the sign Taurus, with his symbolical crest.

It was on account of this Bull that I introduced the mention of the Denderanian zodiac, where we find him sculptured in the attitude of attack, and supporting on his shoulders the symbolical crescent and disc; respecting which it appears to me that Mr. Henley is egregiously wrong, both in his interpretation of the hieroglyphic, and in the astronomy upon which that interpretation would claim to be founded. He says, "Having then found" (by certain discriminations which he has previously been detailing) "the opening of the year, from the *rise of Taurus at the setting of the Dog-star, which is exemplified by the solar circle in a crescent on the Bull's neck*, it will be seen"*—and so forth.

* See "Observations on the Zodiac at Dendera, by the Rev. Sam. Henley, F. S. A." in *Dr. Tillock's Philos. Mag.* vol. 14.

Now this short passage contains two propositions, both of which are demonstrably, if not obviously, erroneous. What can "the Solar circle in a crescent" have to do with the Dog-star? And how should Taurus rise at Dendera, or in any latitude of Egypt, at the setting of this star? Mr. Henley could never have referred to his globe:—but the *memory* of every astronomer, will tell him without such reference, that the meridian of Sirius passes through the middle degrees of Gemini; and that consequently, when Taurus rises, the Dog-star is about 35° below the Eastern horizon. His exemplification then must necessarily fail, when his fact is false. "The solar circle in a crescent" can have no such reference to the Dog-star as Mr. Henley is pleased to state: and I am the more surprised at this error, as, two pages onward—treating of the celebrated sardonix of the emperor Augustus, and alluding to the emperor's signet—he says, "The sign Capricorn is here placed in a circle, *with the Dog-star behind,*" which should have led this learned scholar to reflect, or perceive, that, the rising of the Dog-star is simultaneous with the setting of the stars of Capricorn.

As before stated, I conceive this slowly removable crescent and disc—sometimes exhibited on the head of Taurus, with Aldebarán and the Hyades; sometimes on his neck, or with the Pleiades; further back still in this asterism as it presents itself in the zodiac of Esné; and sometimes with the triangle of bright stars in the head of Aries—to be of first rate importance; especially in ascertaining and fixing the epochas of remote events. I conceive it to be of infinitely more value in this view, than a thousand minor hieroglyphical details. It behoves us therefore, if possible, to leave its true meaning no longer questionable; and to examine whether there be data to enable us to distinguish between the Tauri of the first ages, when the real state of the celestial phenomena was not subject to astronomical sophistications; and that subsequent period, when the fixed stars were fabled to have moved, in order to accommodate matters to vulgar prejudice and the common calendars.

And this brings me to the observations on this subject, of Sir William Drummond—or rather to the omission of observation, of a learned and exploring scholar and critic, who rarely omits or overlooks any thing be-

longing to his subject. Sir William says, that, in order to bring Mr. Hamilton's (and he might have added Mr. Henley's, calculations—which I believe preceded those of Mr. Hamilton in lowering the claims of the French antiquaries) but,—“in order to bring Mr. Hamilton's calculations to bear, it must be shewn that the zodiac of Dendera was constructed by astronomers who reckoned according to the fixed zodiac of the Greeks. Now every thing in the zodiac of Dendera seems to prove that it owed its existence to the natives of the soil. Every thing in it is Egyptian—Egyptian astronomy—Egyptian mythology—Egyptian symbols—Egyptian taste, style, and manner.”*

Internal evidence, as the learned writer says, must decide the question; yet internal evidence does not impress every one with the same convictions, and concerning that afforded by the Denderanian monument, I cannot have the honour of agreeing with Sir William. I, on the contrary, contend, that the zodiac is not of the pure and primitive art and science of Egypt, though I allow that the taste and style of that country do certainly appear to predominate: and the admixture or infusion of Grecian art, is no where else in this zodiac so manifest as in the sign Taurus† surmounted by his symbolical crescent and disc.

But I think it is rather the partial adoption by the Greeks, of “Egyptian astronomy; Egyptian mythology; Egyptian symbols; Egyptian taste, style, and manner,” that we here perceive; and that it is this Greek modification of Egyptian art and science—of the studied refinement of which mixture, both the style of design and that of the execution of the present monument partakes—which has led the earlier French critics of the present age, to the remote inference that the happiest period of Egyptian art, was 16,000 years ago!

All the pure, primitive, and indigenous, Egyptian sculpture, is possessed by a certain decided character of calm solemnity, which is very impressive in suggesting ideas of Deity, because it expresses POWER

* “Memoir on the Antiquity of the Zodiacs of Esné and Dendera,” p. 69.

† But some tinge of it may also be seen in Aries. Compare the leaping Ram of Dendera, with the generality of the quiescent Rams of Egyptian sculpture. I say nothing of the leaping Sagittarius, because I do not recollect any thing of the kind that is unquestionably and purely Egyptian, to compare him with, which is a fresh argument in favour of my position.

without PASSION. Now the attitude, character, and expression, of the Bull in question, are quite dissonant from this serenity. He seems about to set forth on an active, vigorous, and triumphant career.

The submission of the Greeks and Romans to the Egyptians, in what concerned the sciences of astronomy and mythology, and the style of religious architecture which had in Egypt been derived from those sciences, and had grown with their growth, will (I think) be obvious on a little reflection. For the whole time that the classical nations were in political possession of that interesting country, they appear to have exercised but a conciliating control in any other than military and municipal matters, and to have been so far from dictating, in what concerned the truths of science or the dogmata of faith, that they evidently chose, or were, from prudential motives, constrained, to recognize and follow, what they found established—perhaps without comprehending its essence, or fathoming its depth; yielding to the pontifical authorities of that ancient land, the same species of deference that the modern catholics of the rest of Europe, pay to the mother church of Rome. They erected there no Greek nor Roman temples, or we should have found—their ruins, at least; but if they built at all (which they certainly did), re-edified the more ancient temples of Egypt, with so much of strict adherence to the original designs; or constructed others so much in the same style, that modern antiquaries have been fairly puzzled by them. Nothing has more baffled the aims or the accuracy of their speculations: nor laid open a wider space of hypothetical latitude; nor led to more suspicious—not to say erroneous, conclusions.

The question now is, whether some few of the local peculiarities of Greece, be not nevertheless discoverable—peeping out here and there among the minor details of these sculptures, and most likely in those passages which are derived from, or are connected with, the systems of jurisprudence by which the country was governed while subject to the Greeks and Romans?

Affirmatively, I am of this opinion. And these local peculiarities appear to me to have reached to the Grecian modes of reckoning time; wherein it probably became necessary, from considerations arising out of commercial intercourse and mutual convenience, that the native Egyptians

should, in all civil transactions, conform to the usages of their conquerors—with an understood astronomical and religious reservation, probably, in favour of their own Sothic periods and their sidereal year.—Would the busts of Isis, which distinguish her Denderanian temple, have had the *ears of a cow*, but in order to accommodate her simulacra to the legends of Greek fable? The purely Egyptian statues of the goddess have not this remarkable feature. Again, where else in Egypt, excepting at Esné, do we meet with the sculptured *Centaur*? or the *Crab*? The Crab is a remarkable peculiarity of the circular ceiling.

Of this Greco-Egyptian style (if the expression be not too strong) of sculpture and architecture, the temple of Isis, at Dendera, affords perhaps the most illustrious and convincing example that is now extant. It struck Denon and Belzoni—and I believe it has struck all travellers, who have had the honour and happiness of beholding it—as possessing a more refined and cabinet-like character, than any other of the Egyptian temples, and its sculptures as retaining more of their original freshness and finish. Belzoni says “It is the first Egyptian temple the traveller sees on ascending the Nile, and it is certainly the most magnificent. It has an advantage over most others, from the *good state of preservation it is in*; and I should have no scruple in saying, that it is of a much later date than any other. The superiority of workmanship gives us sufficient reason to suppose it to be of the time of the first Ptolemy;* and it is not improbable that he who laid the foundation of the Alexandrian library; instituted the philosophical society of the Museum; and studied to render himself beloved by his people, might erect such an edifice to convince the Egyptians of his superiority of mind over the ancient kings of Egypt, even in religious devotion. This is the cabinet of the Egyptian arts; the product of study for many centuries; and it was here that Denon thought himself in the sanctuary of the arts and sciences.”†

* I believe the author means, not Ptolemy Soter, but Ptolemy *Philadelphus*, who was properly the *second* of that race and name. But to have erected such an edifice as this superb temple, would be at least equally consistent with the character and opportunities of the third Ptolemy, who—doubtless for ostensible reasons—assumed the cognomen of “*the Benefactor*.”

† “*Researches and Operations in Egypt, Nubia, &c.*” pp. 33, 4. But Denon, with his fine vein of enthusiastic feeling, blending the artist with the philosopher, had previously written,

Such is the opinion formed by a man, who if not deeply versed in ancient history, has left a pyramid to prove his capacity and talent for antiquarian observation. Such is the testimony of the most recent of Egyptian travellers. If we now turn back to the most ancient (of those who have written and published their travels), and who went over the ground about a century before the Macedonian conquest, we find—*no notice at all of Tentyris* [Dendera] *and its superb temple*—a most remarkable silence indeed!—Herodotus (in his valuable Euterpe), mentions the names of the chief Egyptian cities that he visited; dwells with just praise on the wonders of the national architecture, and with becoming piety on their chief deities, and the places where those deities were worshipped; and says he journeyed up the Nile to Elephantine, for the express purpose of making observations. Is it probable—is it conceivable—that he would have omitted all notice of a structure so vast, so venerated; so elaborate in its parts, so wonderful as a whole—and so celebrated too, as must have been the Isiac temple of Tentyris, had it been in existence at the time? Surely such a traveller as Herodotus, could not have left unvisited, nor undescribed, the principal temple of the chief deity of the most interesting country in the world.

The Greeks and Romans, then, if I have taken the true view of this period of history, beside being actuated by that habitual policy which induced them to accommodate themselves as much as possible to the manners and customs of the nations which they subjugated—appear to have looked upon the Egyptians as having been their masters in the sciences. Perhaps they continued to the last to experience a kind of

“I went to the ruins, and this time [his *returning visit*] took possession of them in the plenitude of repose. I was first of all delighted to find that my enthusiastic admiration of the great temple, was not an illusion produced by the novelty of its appearance; since, after having seen all the other Egyptian monuments, this still appeared the most perfect in its execution, and constructed at the happiest period of the arts and sciences: Every thing in it is laboured, is interesting, is important. It would be necessary to draw the whole in its most minute details, to possess ourselves of all that is worth carrying away.” The verbal accounts of the Baron Denon and Belzoni, are confirmed by the engravings of this temple which the former has exhibited in his interesting book of Egyptian travels, which as I have great pleasure in hearing, is shortly to be completed.

involuntary or reluctant pupillage, and might wish in vain that the case were otherwise. Their national vanity was here held in check by the curb of science—at once gentle and omnipotent. They felt, though they might not acknowledge, the influence of power without passion. They might aspire to prance and to curvet, but were compelled to walk humbly, and as in the presence of venerated superiors.

And this mental submission was of yore, and appears to have become acknowledged and habitual: for, from one of those venerated superiors, Solon learned and reported that “his own countrymen were always children: mere novices in the sciences of antiquity.” And he seemingly acquiesced in the sentiment. This was before the mad invasion of Cambyses. And Sir William Drummond himself quotes Herodotus, in proof that when *he* visited the Egyptians, notwithstanding they were oppressed by Persia, “they were much more skilful astronomers than his own countrymen.” We now return to the sculptures.

As before observed—the Taurus of the Denderanian zodiac is so far from being in harmony with the characteristic calmness of the indigenous art of Egypt, that he appears about to set forth on an active, vigorous, and triumphant career. And why so?—

We find many of the more ancient coins of Greece and Phœnicia, bearing an impress exactly corresponding with this butting Bull of the zodiac of Dendera. Did the Phœnicians and Greeks copy it from the Egyptian zodiac? I have ventured to offer some reasons why I conceive that this zodiac was not in existence when the earliest of these coins were struck. I think this Bull originated with the Phœnicians, and being a pertinent emblem, was soon adopted by the Greeks.

A pertinent emblem of what?—Permit me to answer that question. If I can render probable its Phœnician origin, the idea of its *originating* with the Egyptians, must in the same degree abate of its claims.

We know that the ancient kings of Tyre, and those of Damascus, affected to be either descendants, or vicegerents, of the great Lord of their idolatry, the Sun; or that they wished their subjects to consider them—upon some political principle or other—(most likely that of insuring reverent obedience)—as so many sublunary Suns: and hence they called

themselves *Ath-Baals*, and *Ben-Adads*; which literally means, *signs* of the Sun; and *sons* of the Sun.

The Ben-Adads of Damascus flourished several centuries before the invention of coining; but the Tyrian Baals continued I believe to a later period. But why should this doubt disturb our argument? It is scarcely worthy of a moment's pause. The successors of Alexander, the Seleucidæ, we know adopted the Taurine symbol on their coinage, in numerous instances. I have introduced the reverse of one of these coins in the head-piece to the present essay. The monarchs of the East, both before, and since, the ingenious adaptation of the art of engraving to the purposes of kings and of commerce, have shewn themselves ambitious of this lofty solar title; and it is natural to expect that, when these earthly Suns ascended, and began to shine forth from, their respective thrones, they would adopt such devices for the reverses of their coins, as should contribute to uphold and disseminate their lofty assumptions, and as the radiant orb of day commenced his glorious annual career, according to the popular calendar, or the belief of the multitude,—from the stars of Taurus, what other device could be so impressively pertinent, as the reanimated sacred Taurus himself, setting forth on his active, vigorous, heavenly, and triumphant career?

That the Greeks might abstract this Bull from his zodiacal station and character, and convert him on their coinage, simply to a poetic symbol, I shall not controvert. Yet, notwithstanding they did so, we read that down to the age of Virgil at least, the classical year commenced in the popular belief, with the first new Moon of Taurus—

When the third night she rises to her sphere,
And with his horns the Bull *unbars* the year;

or, as the symbol has sometimes been interpreted—annually breaks the shell of the Mundane, or Orphic, egg, in order to give life and liberty to its vernal produce—But this I have before cited.

Should these ideas of mine be firmly founded, the general inference I would here draw from them is, that whenever in the sculptured monuments of Egypt, the Bull occurs in this violent action, such sculpture is

probably not of earlier date than the Macedonian conquest; and *may* be of a date as recent as that which the Rev. Mr. Henley assigns to the zodiac of Dendera—which is precisely the age of Virgil. And I think the symbolical disc was probably placed in the middle of the Taurus of this zodiac of Dendera, in order to afford a starting point of occasional facility, in reckoning according to the more ancient zodiac—so that by means of the same zodiac, the annual march of time and the seasons, might be estimated both ways: either as above, or according to another Grecian mode, of which I shall presently treat more at large, which supposed the year to commence at the Summer solstice. Meanwhile the Egyptians, as I conceive, reckoned their own Sothic time by the circular zodiac of the small apartment.

Quitting this branch of our inquiry for the present, and looking again, as we may now with improved mental vision, toward the root, we cannot but be struck with the manifest primitive meaning and importance of the symbolical *crescent and disc* when connected with the precession of the equinoxes. In all ancient astronomical monuments, it is—to the initiated—the *index* of that precession. It might be termed the slowly moving *Century hand* of that immense and magnificent dial, which Providence has “divinely bestowed upon man,” in order to sustain and satisfy his desire of knowledge with regard to the larger divisions of time.—I dwell upon it, because of its cardinal—its invaluable—chronological importance.—At the rate of 72 years to an astronomical degree (avoiding minute fractions) we trace, in sculptured monuments, its regular movement for upwards of 6,000 years,* through three signs of the zodiac, and from the antediluvian ages to the present.—What can be more interesting? What in the progress of time can be more sublime? What can merit better our sedulous attention, that human error may not frustrate the benevolent intentions of Providence in allowing us to earn by scientific exertion, so much grandeur of speculative feeling—such highly probable and distinct evidence of remote chronological truth.

I shall next endeavour to shew that, as far as we are yet acquainted

* I mean that it is that length of time since the symbol began to be used in astronomical sculptures. I have before said that we do not find Pisces adorned with the lunar crescent and orb, and have stated the probable reason why.

with the details of the monuments of *Upper Nile*, they go to confirm the astronomical origin and meaning of the crescent and disc; while they throw light on that other position which I have laid down in a former discourse—namely, that *Æthiopia*, if not the birth-place of Astronomy itself, is at least the parent of the astronomy of Egypt, and perhaps also of that of Chaldea and Greece. I shall now add, that by means of our chronological precession dial, the progress both of the symbol and of the science may be traced; in order to shew which, it will be proper for us to advert to the latest and best information that has been obtained from those remote countries. In effecting this advertence, if I should, for the sake of recalling ideas which may be wanted, occasionally ramble into something approaching to repetition, I shall hope for your indulgence.

Two English gentlemen have lately penetrated to *Æthiopia*, and have favoured the public with an account of their travels; but the cautious policy of the native princes did not permit them to proceed further to the southward than lat. $18^{\circ} 20'$ N.; and notwithstanding they re-discovered the ancient city of Napata, which in importance is second only to Saba itself; and although they visited several other scenes of ruined *Æthiopian* architecture—Axum, and the ancient *Æthiopian* metropolis of Saba, or Meroë, they were obliged to leave *unvisited*. Future travellers however will be grateful for what they have done, and the public will be delighted with their candour, their enterprise, and their taste.

Though they have not dispelled our doubts as to whether the original seat of astronomy was situated to the eastward or westward of the Arabian gulph, they have done something towards it. The most ancient of the sculptured monuments which they saw in *Æthiopia*, did not reach back to the remote era when the Sabæan year opened with the stars in the head of Taurus; a presumption is therefore still left in favour of the Oriental *Æthiopia*, and we are led to hope that astronomical monuments of a more remote date than those of Napata and El-Belal, may yet remain—and remain in the Arabian peninsula—to reward the researches of future travellers.

It may not be improper to re-state here, that I conceive the *Æthiopias* to have been originally divided—not as some have supposed, by the southern course of the Nile, but by the Red Sea; and my further suppo-

sition is, that in the south of the Arabian peninsula, where dwelt the very ancient Homerites (or Cushites) may lie buried many important monuments of the science which adorned the early ages of the world.—In Beloe's additions to the Melpomene of Herodotus, I find that "the name of Ammon was very well known in Arabia," and that "some remains of a temple of Jupiter Ammon are still to be seen there, if the travellers to Mecca may be believed"—(and on such a point why should they not?) "The place is called *Hesach-bir*." This however does not *prove* more than that the Mythology and Astronomy of Nubia and Lybia, reached to the Arabian peninsula.

But I shall be expected to state why I speak with so much assurance of the era of the oldest Æthiopian monuments *visited* by our enterprising countrymen. To explain this, it will be necessary to step forward a little, and not improper to enter a distinction which may tend to keep us clear of future confusion.

The classical astronomers appear, as I have before indicated, (in consequence of the precession of the equinoxes, the knowledge of which had been imparted to Pherecydes and Thales, by the astronomers of Egypt or those of Asia)—to have fabled that the stars advanced in longitude. Perhaps they did this—as perhaps might be done in other countries—in deference to certain vulgar superstitions concerning the accredited celestial signs of the seasons. To fable the removal of the Bull, they might find a less difficulty than to explain the precession.—Whatever the reason—they feigned that the stars of Taurus, which for twenty-one centuries had been the leading stars of every new year, had removed into the dodecatemoron of Aries; those of Aries into that of Pisces, and so on round the circle of the zodiac. That the Greeks did this, in reckoning their Solar year,* is evident from several circumstances, but particularly from the number now extant of those sacred Bulls of bronze, of which I treated in a former discourse, where a hole is left on the top of the head, for the insertion, by means of a metal peg, of the disc and crescent, the symbols of the Sun and Moon—either or both of them, as astronomical circumstances

* It is known that the Greeks commonly reckoned by lunar time, beginning their year with the first Moon after the Summer Solstice; but, as is stated in the *Archæologia Attica*, they had also a Solar year *commencing with the Spring*. Lib. ii. cap. 10.

might require—at the returning season of the vernal equinox. And that this custom of occasionally inserting the disc and crescent on the head of Taurus at the vernal season, continued among the classical astronomers—those of Rome as well as those of Greece, down to the Augustan age, is equally clear from the stanza of Virgil, which I have before quoted. These astronomers knew very well that the solar year, during the period when most of them lived, commenced with the heliacal rising of the stars of Aries; but they chose to feign that Taurus was still the leading sign of the zodiac; just as, in our popular astronomy of the present day, we begin our enumeration of the zodiacal constellations with that of Aries, although more than 2000 years have rolled away since Aries was really the first of the signs.

Did the Egyptians do the same? I think not, of themselves; nor while subject to the Persian dominion; nor probably till after the invasion of Alexander. Yet some uncertainty must, for the present, attend on the answer to this question.

All the nomes of Egypt do not appear to have been subject to the same religious observances; and hence, perhaps, one cause of variation in the promulgation of their *fasti* and calendars. Esné is said to have been sacred to Ammon, the *Ram*-headed (or Ram-horned) god: while at Dendera, whose great temple was dedicated to Isis (or Nature), the Bull might be held to be more holy. Meanwhile, the zodiacs of Dendera shew that the Egyptian astronomers of that period were well informed of more than one mode of estimating time, and perhaps were competent, and habituated, as political or religious occasions might require, to reckon by more than two.

At Sais too the celestial Bull appears to have been treated with sacred ceremonies, from the era of the pristine order of the zodiac, down to, at least the time of Herodotus, as we may gather from the legend which he has placed upon record, concerning the Bull of Mycerinus.

The priests of Sais, with their habitual anxiety, as we may suppose, to conceal their mysteries from strangers, told of this bull or heifer, a cock and a bull story, (which even Herodotus, who has been thought sufficiently credulous, could not believe),—*how* that king Mycerinus, falling in love with his own daughter, ravished or seduced her, and after her

death, entombed her in the statue of a Bull, which was shewn to the Grecian traveller.

The truth which peers through the veil of this singular legend, which at the first was probably no more than an *astrological* reverie—seems to be as follows. The hinder part of the exhibited Bull, (which, we are told, represented a young animal about the size of nature)—was covered with a purple cloth; the head and neck being uncovered and richly gilt. Betwixt the horns was a golden star, which I interpret to be intended for Aldebarân. It was splendidly illumined by night, and costly aromatics were burned before it by day. This shews the religious veneration in which the statue was held. Every year it was brought forth from its superb hall and *placed in the Sun-shine*.* No type of the entrance of the Solar deity into the sign Taurus, could be more expressive, or convey this latent meaning less equivocally. Now as Mycerinus lived during the Taurine ages, having been the son of that Cheops who erected the first of the pyramids; and as the ceremony of annually bringing forth the Bull into the solar radiance, as well as the oblations which were diurnally offered at his shrine, continued down to the age of Herodotus (and how much later I believe is not known), it would appear that the Egyptian priesthood conceded, in this instance at least, their better astronomical knowledge, to the long confirmed superstitious prejudices of the vulgar.

Without affecting to strike a balance here, or to write as if all the nomes of Egypt *were* subject to the same system of sacred observances in all its details, we may be allowed to turn our regards toward the astronomy of Æthiopia and Chaldea. However the case may have been in some parts of Egypt, I see no reason to suppose that in either of these countries, any such fictitious advancement of the stars into the neighbouring dodecatemoria, was had recourse to, as that which is here under our notice. I think that the astronomers of these countries were well acquainted with the precession of the equinoxes, and sincere enough in their religious rites and their public monuments, not to dissemble the

* There is another story, equally susceptible of astrological explication, of this unfortunate Princess and bull, ending with her dying request that she might once a year behold the Sun.—See *Euterpe*, cxxix, &c.

mystery; and that accordingly when the colure of the vernal equinox had evidently removed from Taurus into Aries, new rites, or new modifications of their more ancient rites, were established; and of such importance does this appear to have been, that—in Æthiopia at least, and I suspect in Lybia, and in Egypt also,—new temples were erected and hieroglyphically adapted to the reception of the new deities of the vernal season. Of the Assyrian temples, or chambers of imagery, none remain; but the engraved cylinders which do remain, corroborate my position.

Having asserted thus much of the Æthiopian monuments, I proceed to the proof. In the sculptured temples of Upper Nile, visited by Messrs. Waddington and Hanbury, the crescent and disc no longer appears on the head of Taurus—(though unquestionably these sculptures are of much more ancient date than the Grecian bulls)—but is removed to the forehead of the Ram, or of that ram-horned God whom our travellers, after the poets and mythologists of Greece, call Jupiter Ammon.

These sculptures—for several of these ram-horned figures, surmounted by the lunar crescent and solar orb, or disc, were seen—confirm the testimony of those writers who think and assert with Lucian, that JUPITER *Ammon* is in reality no other than SOL in *Aries*, whom I have supposed to have been trans-named *Jupiter Ammon*, by the national vanity, joined to the piety—at least their popular veneration for their own deities—of our worthy friends, the Greeks. That the far-famed temple of the great Oasis was called that of Ammon by the Greeks, and probably by the Egyptians, of the age of Alexander, is clear from their accounts of the military pilgrimage of that conqueror, to the Lybian oracle. That the shrewd and inquisitive Lucian, was of opinion that no other than the Sun in the sign Aries, was meant by that epithet, is no less clear from his express words. “The famous Lybian oracle of Ammon, whom they pourtray with a Ram’s head” (he says) “refers to the celestial sign of that name, and to the method of inquiring into futurity by the aid of astrology.” No evidence can be more pointedly to the purpose: Yet let us hear Josephus. He informs us on the authority of Lysimachus, that, upon an occasion of famine in Egypt, Bocchoris the king, sent to

consult the Ammonian oracle: "The God replied, that the king must purge his temple of unholy and impious men, and drive them into desert places, and drown the lepers and diseased persons, THE SUN being indignant that such wretches were suffered to live." Does not this plainly shew that during the reign of Bocchoris, the Sun was venerated as the deity of the Ammonian temple—the Ram being regarded as the seat of his incarnation for a time, or as the *Thoth* or commencement of his annual career?

Permit me briefly to recapitulate the manner in which the introduction of the name of Jupiter was effected. The Sun was the chief deity of the adoration of the Sabæans: and when the Greek poets and mythologists visited Tyre, Babylon, the other cities of Asia, and the nomes of Egypt, hearing that Moloch on Baal-Ammon, or Beel-Samen, was worshipped in these celebrated cities, and finding that these words meant literally *king* or *lord* of *Heaven*, this middle term, afforded them a ready opportunity of which they did not fail to avail themselves, both in their political conduct and their writings, of indulging their habitual policy of finding their own deities wherever they went. No religious transfer could be more easily accomplished, because none more unconsciously to the multitude. In Egypt, in Æthiopia, in the Lybian Oases—wherever the personified Sun was king of heaven, their own Jupiter being also king of heaven, the Deities were identified—occasionally with the local addition of Belus or Ammon: the latter,—that is to say, the zodiacal Ram—being especially honoured in those Sabæan countries which did not dissemble the removal of the vernal colure, during the twenty-one centuries of his astronomical ascendancy; and of course the heliacal rising of the chief stars of this constellation, was hailed in these countries with festive rejoicings.

It was thus in Assyria and in Phœnicia: It was thus for a while, under the government of Solomon and other of the Hebrew kings; and it is upon record, and is confirmed by Mr. Waddington's account of the sculptures of El-belal, that it was also thus in the Oasis and in Æthiopia.

Hence it is that our Æthiopian travellers generally found Horus, the

young deity of the vernal season,* or infant year,—associated in the Æthiopian groups with Baal-Ammon, (to use an Asiatic denomination in the absence of the unknown Æthiopian name of this incarnation of their chief deity): and hence, when Horus appears sceptred among these sculptures, his sceptre is surmounted, as Mr. Waddington affirms, “by a crescent and ball,”—denoting the first new Moon and new Sun.

Hence too the Æthiopian sphinxes seen by these gentlemen, were *Crio* sphinxes: that is, having Rams heads.—But it will be proper to cite instances of these astronomical allusions.

At Soleb, which is lower down the Nile than Napata, and in about lat. 20°, 20′ they found two sphinxes, one only having the head remaining, and that a *Ram*’s head: and they found two figures, which our traveller pronounces to be of *Jupiter-Ammon*. He says, “Jupiter-Ammon appears twice among the remaining figures, and to him I suppose the building to have been erected.”—These figures have their heads surmounted by the symbols of the Sun and Moon; but the former symbol is no longer a disc, as in Egypt, but is orbicularly represented (according to Mr. Waddington—I suppose he must mean in those instances where the God is sculptured in the round, or in *alto-relievo*). And it is further observable, that their heads are human heads; and the figures, ram-horned human figures—the crescent, orb, and ram’s-horns, being represented as a super-induced head-dress.

I have *quoted* this ram-horned figure crested with the Solar and Lunar symbols, as he appears in this gentleman’s sketch, in the etching which stands at the head of the present section, in order to afford my readers a comparative view with other Ammonian sculptures. Throughout Æthiopia, according to Mr. Waddington’s account, confirmed by his lithographs, the symbols of the conjunctive Sun and Moon, are a “ball and a crescent;” whereas in Egypt (at Thebes and at Esné)—where also the celestial Ram appears among the religious sculptures, instead of a crescent beneath the orb, we behold the cobra capella, or the Egyptian asp or adder, (I cannot be certain which), and another pair of horns

* And therefore sometimes termed the offspring of Isis and Osiris: that is of Nature and the heliacally-rising stars of the constellated Husbandman.

bearing resemblance to those of the goat. For the former of these variations I cannot satisfactorily account. The serpent or asp *may* signify what the lunar dragon does in other countries: but the *goat's horns* appear to denote that the bright stars of Capricorn which are known by that name, (the *alpha* and *beta* of the Constellation), were on the meridian in the latitudes of Thebes and Esné, where these sculptured goat-horned rams chiefly present themselves,—when Aries was rising heliacally; which a reference to the globe will shew to have been the fact.

In apposition with this Æthiopian head of Ammon (or Sol in Aries) I have shewn the Theban specimen, as it is represented in the great French work on Egypt; which exactly resembles ten or a dozen instances, to be met with in the same work, of elaborate Ammonian sculptures at Esné: and this I have done that the reader may have a fair opportunity of forming his own conclusions, on ocular comparison.

If the Egyptian symbol be—as it must be—admitted to be that of the conjunctive Sun and Moon, the Æthiopian crescent and ball cannot be questioned. We have before argued, and seen, in the case of Taurus, that this important conjunction only took place, astronomically and exactly speaking, once in eighteen years and a fractional part, and of course, the time between one conjunction and another, or which measured the length of the *Saros* (or cycle), was the same after the colure had removed into Aries, when the stars called in the Arabic *Al-Sheratân*, or *the Sign*, preceded all others in the Lunar zodiac: and, as in the former case, the symbols of the Sun and Moon were made attachable and removable at pleasure, or according as those luminaries might or might not, at the commencement of the vernal season, present themselves on the forehead of the ram-horned God. Conformably to this reasoning, we find, (as was formerly noticed in the case of the sacred Bulls) holes remaining on the heads of some of the sculptured Rams.

There is a colossal Ram's head of this description, formed of reddish sandstone, and of tolerably good sculpture, in the larger Egyptian apartment (that which contains the Alexandrian sarcophagus) of the British Museum, which has doubtless belonged to some Ammonian shrine, or colossal statue of that deity. A representation of this Ram's head will

be found, combined with other german matters, in the vignette head-piece to the present section. I have shewn the hole by means of which the symbols were attached, on those sacred occasions when their mystic effulgence was supposed to beam from the forehead of the God.

In this vignette I have also introduced the Bull upon which I have commented, from the oblong zodiac of Dendera, (copied also from the great French work), and the reverse of a coin of Seleucus, exhibiting the Syrian version of the same Bull in the attitude of attack,* older by more than half a century, than the commencement of the Egyptian reign of Ptolemy the Benefactor.

To proceed with our evidence, respecting the sculptures of Æthiopia, collected from Waddington's travels: when that gentleman and his companion arrived at Djebel el berkel, or Napata, they found a sacred rock or mountain, about a mile and a half from the river, adorned with ruins of pyramids and temples, and, among the latter, one of the largest in the world; but this appears to be not so old as some of the others, and the subjects of the sculptures contained in it, are not mentioned. To the north-west of this is a small temple, which (says Mr. W.) "has been dedicated to *Jupiter Ammon*. We distinguished the figure of the *Ram* sitting on an altar-piece."—A procession is then mentioned in the presence of Horus, "the young divinity with the thin beard," the weapon in whose hand, has the *Ram's head* with the ball on it at the end. Of these sculptures the volume contains no etchings. I wish it did. What our traveller terms a weapon, I suppose is a sceptre, or staff of authority.

About a hundred yards west of the large temple, stands a small one, not one tenth part of its dimensions, but very curious, and I should suppose of primitive architecture. Its four interior chambers are excavated in the rock. On the right side of the third chamber is "*Jupiter Ammon*, seated; and Horus on the left, with a figure of Isis standing behind each."—On the right of the Adytum, *Jupiter Ammon* appears again with Isis, Apis (the Bull), Osiris, and Horus, and in "the far corner

* This coin was dug from the ruins of Babylon, and brought to England by Capt. Lockett; a circumstance, however, which has nothing further to do with our present argument, than to shew the genuineness of the coin.

(writes Mr. W.) on the right hand, is a horned animal with a ball on his head, reposing on a pedestal, with a *branch* growing up before it, of which the leaves resemble those of the Doum-tree." I must be allowed to regret that no sketch appears to have been taken of this horned animal, ball, and doum-tree branch; as I suspect the latter to have represented a part of what the Canaanites and Hebrews termed an *Ashre*—an astronomical divining instrument, consisting of such branches, (of which I purpose to discourse in my next Lecture),—and the whole group to have had interesting astronomical references. A similar branch, however, (as I apprehend,) is exhibited in the hand of an enthroned figure, beneath the portico of the fifth pyramid at the same place, of which the travellers add that, before this figure are other "smaller ones, bringing branches such as are held in the hand of the God." I have copied this deity and branch in an illustrative vignette, which the reader will find a little further on.

When the prophet Ezekiel witnesses in vision the various idolatries of the apostate Hebrews, his heavenly guide speaks of their putting the *branch* to their nose, as being the climax of impiety and profaneness. I interpret, that it was in Canaan, what making the sign of the Cross is in catholic countries; or kissing the hand to the Sun or Moon was in the age and country of Job:—namely, a mystic sign or token, of recognition and worship of the Sabæan host, severally, or collectively; and consequently of renunciation of the worship of Jehovah.—After unveiling the idolatrous rites of the Sabæans, to the eye of the prophet, his celestial guide says, "Hast thou seen this, O Son of Man? Is it a light thing to the house of Judah, that they commit the abominations which they commit here? They have filled the land with violence, and have returned to provoke me to anger; and lo! they put the branch to their nose!"*

The putting the branch to their noses; or it might be, the kissing its extremity, was evidently regarded as the overt act of treason to the true God, and of homage to the Sun or the sub-deities of the starry host. I imagine that it is in consequence of the veneration thus offered to *Ashre*-branches, that we so frequently see them represented in Sabæan sculptures: of which

* It should be remembered that this impiety was perpetrated by the worshippers of the rising Sun, who turned "their faces toward the East."—*Ezekiel*, viii. 16, 17.

I am prepared to produce several examples. The French work on Egypt too, exhibits examples of these branches:—Their general form is that of a detached branch of the Palm, or Doum-tree, as if springing from a central bole, and bending gracefully over; something in the manner of the *aigrettes* of the jewellery of Persia, which may possibly be derived from thence—as I have formerly hinted that the stars of modern nobility are, symbolically speaking, from those of heaven. I trust that, as mine are “Sabæan researches,” and, as I chiefly labour at the “restitution of decayed intelligence,” I shall not be accused of having wandered too far after this collateral branch;—from which let us now return to Waddington and Æthiopia.

Not ten yards south of the small temple we have just visited, is another, still smaller, and on the back wall of the room right of the adytum, are two defaced figures of *Jupiter Ammon*, and the young *Horus*. It is well known that this latter deity is commonly esteemed to be the same with the Grecian *Apollo*. The Greeks, upon their usual principles, could not fail so to regard him; and in fact, I believe that in the superstition which embellished with these sculptures the banks of the Nile, he was the personified vernal sun.*—The author inclines to believe this little temple to be older than any of those of Egypt or Nubia—most of which he appears to have had the pleasure of personally inspecting, and to have been “*dedicated to BACCHUS*.”

I shall presently have the honour of offering some further observations on the era of the erection of this temple; but concerning this spurious *Bacchus* (as I must venture by anticipation to call him) I feel it necessary to notice here an error into which our traveller has fallen, lest it should—as it very naturally might—lead to others.

Herodotus has written that only *Jupiter* and *Bacchus*—by whom, if

* *Herodotus*, as I understand him, alludes to the Sabæan allegory of the changing seasons, on which this mythological fact is founded, when he says the priests informed him that “Immortal beings had formerly reigned in Egypt: *Horus*, whom the Greeks call *Apollo*, was the last of these; he was the son of *Osiris*, and after he had expelled *Typhon*, himself succeeded to the throne.”—*Beloe’s trans. Euterpe*, cxliv.—Those who have read my essay on *Osiris*, will be at no difficulty here. *Osiris* is the *Bacchus* of *Herodotus*, and in no other way could *Apollo* be regarded as his Son.

the explanation submitted to your discernment on Wednesday last, be just—the *Sun*, and the *constellated Husbandman* are to be understood—Only these two deities, he says, were worshipped in the metropolis of *Æthiopia*.*—Strabo and Diodorus have added other deities to the *Æthiopian* pantheon; but the fair presumption is, that these were either venerated in other and remote parts of that country, or in the oriental *Æthiopia*; or are of subsequent introduction:—and that the *oldest* Gods of the occidental *Æthiopia*, are those mentioned (under the usual Grecian designation or disguise) by Herodotus, as having been the sole objects of religious worship at Meroë.

I suspect that it is meeting with this mention of Bacchus, in the writings of the father of history, that has led Mr. Waddington to suppose this ancient Sabæan temple, within so short a distance of the probable site of Meroë, to be dedicated to Bacchus. I hope that a former Discourse has sufficiently shewn, that the squabby and deformed figure which he found within, and has exhibited—and which appears to be so well calculated to sit astride over the whiskey barrels of the Bacchanalian temples of the sister kingdom, can never be intended for a sacred representation of the patriarch, or demi-god, who survived the Deluge; who first taught the cultivation of the vine; and whom Herodotus† himself pronounces to be the same with Osiris.

I trust I have in that Discourse, satisfied my auditors that those authors are right, who have supposed the Grecian Bacchus to be no other than the Osiris of *Æthiopia* and Egypt: and I think when we come to reflect, that this same hoddody-doddy deformity, makes his appearance within an edifice where the other sculptures are in a style so superior as to prove that the figure is intentionally deformed as we behold it, and not the work of any wretched bungling stone-cutter who could not do better; and when we come to recollect further that Herodotus expressly says, “*VULCAN was sculptured as a Pigmy*”—Under these circumstances, I think

* “The inhabitants pay divine honours to Jupiter and Bacchus only, but these they worship with the extremest veneration.”—*Beloe’s Herodotus, Euterpe*, xxix. † “It is to be observed that in the Greek tongue, Osiris is synonymous with Bacchus.”—*Ibid.* cxliv.

that the present bandy production of one of "Nature's journeymen," can be no other than a primitive representation of his lame and sooty godship; whom we know was much honoured on the banks of the Nile; and whom the Greeks—perhaps finding him to be thus lamely represented—fabled to be hurled from heaven, and, of course, received in his fall by an island of their own Archipelago. But let us hear on this subject our ancient and venerated friend:—"Cambyzes (he says) once entered the temple of Vulcan, and treated the shrine of that deity with great contempt. The statue of this God exceedingly resembles the Pataici which the Phœnicians place at the prows of their triremes. They who have not seen them may suppose them to resemble the figure of a pigmy. Cambyzes also entered the temple of the Cabiri, to which access is denied to all but the priests. He burned their statues, after exercising upon them his wit and raillery. *These statues resemble Vulcan, whose sons the Cabiri are supposed to be.*"* As there are two of these ship-headed idols† in Mr. Waddington's Æthiopian temple, they may possibly be meant for the *Cabiri* of whom so little is known. Dismissing these deformities, we must now briefly refer to principles which I have no doubt your professor of astronomy has far better explained: we must go back to what I have termed our divine dial for the larger divisions of time; and which, by bringing us toward the probable date of the erection of these interesting Æthiopian monuments, may afford us a pertinent instance of the antiquarian and chronological use of the Sabæan symbols, the sculptured crescent and orb, or disc.

Assuming then that the equinoctial and solstitial colures advance to the Eastward at the rate of one degree, or one 360th part of the whole zodiacal circle, in seventy-two years—which has been shewn to be a computation sufficiently exact for general purposes—and bearing in mind that at present the vernal equinox has passed through the whole of the dodecatemorial space which is allotted to Pisces, since it quitted the sign

* Beloe's Herodotus, Thalia, xxxvii. † My head-piece vignette exhibits one of them, for the better information of the reader; who I dare presume will agree with me that they could never have been intended for representations of Bacchus.

Aries; we must elevate the arctic pole of the celestial globe to the latitude of Napata, which, according to Mr. Waddington's map, does not differ much above two geographical degrees from that of Saba (or Meroë) as laid down by Ptolemy and confirmed by Bruce. The latitude of Napata, the modern Djebel el-berkel, is about $18^{\circ}, 20'$ North. If we now reckon from the heliacal rising of the star Arietis, which is the *alpha* (or first star) of Aries, and allow,—as is customary with astronomers,—sufficient time for its getting clear of the solar radiance, so as for it to become visible in the crepusculum of morning; it brings the equinoctial Sun nearly to the meridian of the Musca-borealis: that is, to the middle degrees of the Taurus of the fictitious, and the Aries of the real, zodiac. I am pretending to no more accuracy here than may serve the purpose of general explanation.—Let us say 45° from the present place of the colure. If these 45° be multiplied into the 72 years, which we have learned to be the rate of precession, it gives a result of 3240: This brings us to 1418 B. C. Comparing this date with early scriptural events, and the received chronology, it leads us to perceive that these interesting Æthiopian temples were erected at some time or times, between the Hebrew exodus and the elevation of Saul to the throne of Israel.

Concluding here what I at present have to offer concerning this ancient symbol or sign of the vernal equinox, and usual accompaniment of the Greek-named Jupiter-Ammon—the *crescent and disc*—(or *ball*, as it is termed by Mr. Waddington and sculptured in Æthiopia :) I feel anxious to revert for a moment to Ammon himself.

In stating the agreement of my opinion with that of Lucian and Lysimachus, I by no means meant to put the *planet* Jupiter out of the question. So far from it, that my more mature opinion on this point—indicated before, and formed from reflecting on all the above matters,—is, that, a memorable and rare conjunction, of Sol and Jupiter in the sign Aries, forming the commencement of a great astronomical cycle, affords the true interpretation of JUPITER-AMMON, and is the real origin and epocha of the consecration of the principal of the shrines and temples that were erected in honour of that deity. I mean the very rare and coinci-

ding commencement in the sign Aries, of a year of Jupiter with that of the ordinary solar year of Lybia, Æthiopia, and probably of Egypt.

The more ancient inhabitants of the Lybian Oasis were a mixture of Æthiopians and Egyptians. Their temple and oracle were the oldest known to, and *acknowledged by*, the Greeks. I suspect that its endowment and consecration, bore date from this memorable Sabæan or astronomical era. But let us take an astronomical view of those Ammonian mythologues which appear to be best attested, and attended with most probabilities. Let us attend for a moment to Hyginus and Herodotus.

The legend related by Hyginus is briefly as follows:—As Bacchus was setting forth upon his travels, being distressed with thirst, a Ram appeared, which *led him where there was water*. The grateful Husbandman entreated of Jupiter that this Ram might have a place in the heavens; which being granted, a temple was erected to Jupiter-Ammon.

Small time and trouble is here necessary to be occupied in explanation. We have only, as we look at the globe elevated to these low latitudes, to bear in mind what I have formerly quoted—that “the world which Bacchus traversed *leading a host* of fauns and satyrs in his train, whose images are to be seen among the constellations,” was the celestial *mundus*. Casting our eyes to the celestial sphere, we behold that in the Æthiopian spring-season, when the stars of the Husbandman rose acronically, they come above the horizon so as to be completely visible, precisely after the Sun has sunk with the head of Aries. This solves the ænigma without the least difficulty, for the Ram leads Bacchus through the night to where there is water; that is to say, till his stars were believed to set in that Ocean which was believed to surround the Earth. And as this took place in the vernal season—we may say on the night of the Sun’s arrival at the equinox, after its removal to Aries, and during the earlier part of the period which I have termed the reign of the zodiacal Ram—it affords the strongest astral corroboration perhaps that could be offered, of the chronology of the precession, and the Egyptian use of the hieroglyphical solar symbol.

Nor is the legend of Herodotus less susceptible of similar explication

and solution. He says that, Jupiter being reluctant to shew himself to Hercules, yet not being able to resist the importunities of that deity, he employed the following artifice:—he cut off the head of a Ram, and, covering himself with its skin, shewed himself in that form to Hercules: from this incident the Egyptian statues of Jupiter represent that divinity with the head of a Ram. The Ammonians, who are a colony composed partly of Egyptians and partly of Æthiopians, and whose dialect (a pretty certain criterion) partakes of both languages, took that custom from them.*

This record of Herodotus is exceedingly curious, and can be explained in no other way that I am at all aware of, and that is in any degree consistent either with the majesty of Jupiter, or with the classic beauty which belongs to fabulous and poetic construction. A mystified conjunction of the planets Sol and Jupiter in the sign Aries, at the commencement of a great cycle of intricate revolutions, is important enough to account for the erection of colossal statues and oracular temples; while it is simple enough to explain naturally and easily, what in other views cannot but seem ridiculously incredible. Hercules is the Sun. Jupiter's fabled reluctance is aptly enough explained by the occasional seeming retrogradations of that planet, even in the course of its actual advancement. Of this we had, not very long ago, in the heavens themselves an ocular instance, and which took place in this very sign Aries.—I pass for the present that other Greek fable of Jupiter's being concealed as a Ram during the period of his expulsion from heaven by the Giants; though it be also of Sabæan origin and of stellar explication.

When Astronomy was Religion, and Religion arrayed herself in mystic pomp and circumstance, and surrounded the adytum where she sat, with occult ceremonies and hieroglyphical curtains; we may easily conceive that the close of a mighty period of complicated astral revolutions, and the commencement of another, would be awfully beheld, and met with corresponding solemnity; and that, on the day of that equinox which was honoured with the important presence of Jupiter, mingling

* Euterpe, xlii.—I have not a Hyginus to refer to (here at Dulwich)—I take the fact from the First Book of Banier's Mythology.

his rays with those of the ascending Sun, and both beaming with benevolence on the horoscope of the commencing cycle—numerous victims would smoke on the altars of the thrice-honoured rising Ram.

THE reader perceives that I think it very likely that at a time commemorated in Æthiopia, in Egypt, and in Lybia, in this impressive manner; by sacred observances, and by the erection of temples calculated to outlast these immense cycles of planetary revolutions—Jupiter was rising from the cusp of the horizon—that is, was in the sign Aries, having just passed his ascending node; and that the Sun was also rising there: so that the Sun, Jupiter, and the bright star Arietis, were seen together, or the Sun within half an hour of the two latter, at the dawning of the day of the vernal equinox.

It would be very interesting if we could come at the epocha of this great astronomical event; and it would increase that interest if we could discover that the Moon also was in conjunction with the above. But this is too much for me to venture to hope for; and I must frankly confess, that the statements I am about to make can be little better than hypothetical, since I am too deficient in astronomical knowledge for it to be much otherwise. He therefore who pleases may skip or fly from this line of notice and confession, till he arrives at the printer's next line of demarkation.

But I feel something like an obligation to hazard at least the semblance of particulars, in order to help the less informed, as well as the better informed, of my readers, to a thorough conception of that general principle which it seems necessary they should know, and which the latter will of themselves know how to follow up.

The periodical revolutions of the planet Jupiter, may not inaptly be compared to those of the hour-index, or hand, of a clock or watch; the former moving through the twelve signs of the zodiac, in one of his revolutions, as the latter does through the twelve signs (or hours) of the dial-plate, in one of his; the year of Jupiter being the day of the dial-

plate. The minute-hand meanwhile—which may be compared to the Sun (more properly indeed to the revolving Earth—which in the present case comes to the same thing, the Sun's rising and setting being known to be only a mode of speech) performs this round in a single hour, or one of *his* years. Hence it will be clear that the Sun must come in conjunction—that is to say, must overtake Jupiter somewhere in the circuit, once in every revolution, as the hour-hand does the minute-hand. But here the parity ends, owing, I suppose, to the different inclinations of the planes of the orbits of the Earth and Jupiter; or rather, to our not looking at the system of the universe in the abstract, as we do at the dial-plate; and to our calling by the term *conjunction*, only those positions of the Sun and Jupiter where they form a right line with our own visual rays as we stand on our own planet. There would else, I apprehend, be further concordance with the clock, which brings its two hands in conjunction, once in every cycle of twelve hours, namely at noon.

An astronomical friend has computed for me, that Jupiter must make 152 revolutions, and the Sun or Earth 1,803—which of course would take up the latter number of our years, in order to accomplish a conjunction of these planets in the given sign, Aries—I mean so exact a conjunction as for the planets to meet again apparently at the same star, or degree* of the ecliptic.

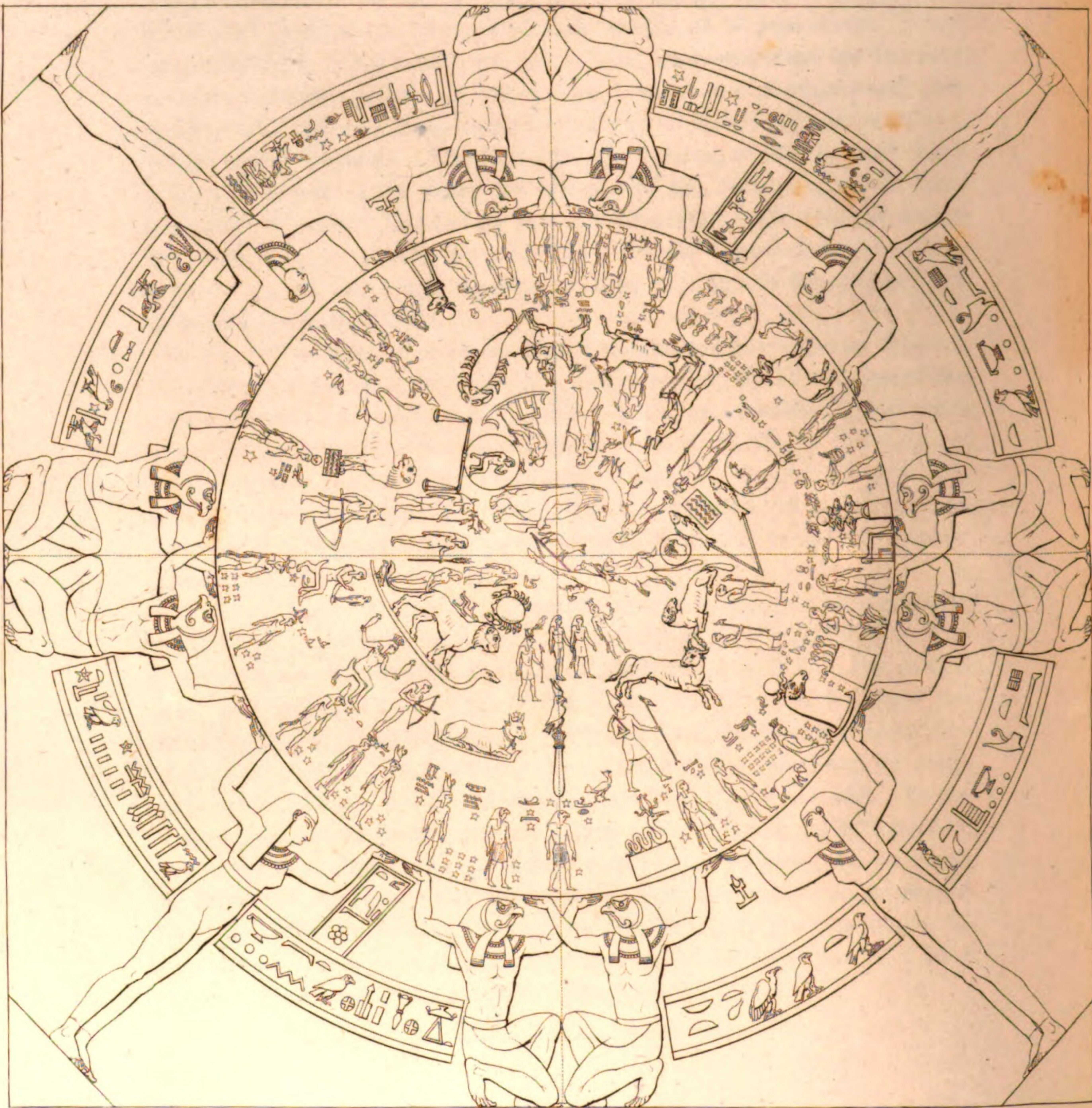
Now, according to the “Prophetic Almanack”, which I believe far transcends all other publications of the kind that have yet issued from the European press; and which of course may be relied on for facts of the kind which I am about to state—the Sun entered the sign Aries,

* I have here to record a mistaken computation which has unfortunately found its way into the latter part of my fifth Essay, in discoursing of a Babylonian figure of Jupiter. The friend who made it must have been *under the influence of his unlucky stars* at the time, as he probably never made such a mistake before. Himself afterward discovered it, which has prevented me from repeating it here. It respects the period of time between one conjunction of the planets Sol and Jupiter, and another, which in my 150th page is stated to be 1,080 years, whereas it should have been as here stated, 1,803. Of course this contravenes my former computation of the age of the Babylonian cylinder; and carries it back either to 21 B. C. or to a very obscure period of Babylonian history, between the reigns of Aralius and Bel-Ochus, 1824 years before the Christian era.

March 20th, 1821, at ten at night nearly; and he came in conjunction there with Jupiter on the 27th of that month, at 15' past seven. They must therefore, if I mistake not, have been near—perhaps on the very meridian of—the *Alpha* of Aries (the bright and distinguished star Arietis) and within an hour and a half (a very trifle in long computations) of the time of Sun-rise. The Sun's longitude being $6^{\circ}, 30'$, he must have been near Arietis at the time; and the rest of the reckoning would have been easy, if modern Astronomy had not tormented itself with the fiction of the fixed stars having moved; which I freely acknowledge threatens to throw me out here, and disables me from putting any other than (as I said) an hypothetical case.

In a gross manner, I conceive that I might put the case as follows. The *Solstitial* Sun is 2,160 years in passing from $6^{\circ}, 30'$ of one sign of the zodiac, to the same number of degrees in the next; therefore 2,160 years before A. D. 1821, the Sun and Jupiter were in $6^{\circ}, 30'$ of the Aries of the real zodiac, on the 20th of March—or say at the vernal equinox: now 2,160 years before 1821, was 339 B. C. which added to the cycle or period of 1,803 years, brings us to 2,142 B. C. for the era of their former conjunction at the same place.

It will probably here be remembered that in a former part of this essay, in calculating the general period of the erection of the Æthiopian temples to Jupiter Ammon, I arrived at a result of 1,418 B. C. But in that case, an allowance was made of the distance between Arietis and the meridian of the Musca-borealis, which is 9° , for the emergence of Arietis and Jupiter from the Solar rays. If the same allowance be made here, $72 \times 9 = 648$, which subtracted from 2,142, leaves 1,494. In the above calculation I should probably have allowed the usual 10° or more for emergence, but the bright triangle of Musca seduced me to place the Sun at that mark. Had 10° been allowed, my computations would have met within four units, which is a singular felicity of coincidence for calculations which refer to remote astronomical periods; for $72 \times 10 = 720$, which subtracted from 2,142, leaves 1,422.



CIRCULAR CEILING lately removed to PARIS from the TEMPLE of ISIS at DENDERA.

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EGYPTIAN ZODIACS.

HAVING rendered, as I should hope, sufficiently clear, the meanings of the hieroglyphical symbols which I set out with proposing to treat, I might here have desired leave of your Lordship to allow me to conclude my present Essay, where the intended Lecture closes; but local occurrences, important to science;—interesting I am sure to your Lordship—particularly the recent removal to Paris of one of the celebrated zodiacs of Dendera,—have given to those antique sculptures where the Solar and Lunar symbols, and the sacred Rams and Bulls, present themselves, additional demands on our attention: much higher demands than any man who has not been gratified with the pleasure and advantage of personal inspection of the originals, can reasonably be supposed to be prepared to meet at once: demands however, which every antiquary who has in any degree studied the subject—*should* meet, to the best of his present ability, since even hints that are founded in truth, have electric properties when they come in contact with kindred intellect. In fact, TRUTH is the *electric* element, as well of antiquarian research, as of morality and mathematics.

We know too, my Lord, that an intense and increasing interest, is rising and rallying around these wondrous monuments: an antiquarian appetite, that will for some time continue to “grow by what it feeds on.” They are beside so intimately connected with our present subject, that I must venture a few further remarks on the published outlines, although those outlines do not exactly agree: I must run the risk of committing myself; and the hazard of such liberal indulgence as may or may not be candidly granted to an untravelled votary of Isis and Astronomy, who will be not unwilling to wash out the antiquarian sins he may commit, by the assiduities or the penances of future pilgrimage; nor to go to the zodiacs, if the zodiacs do not come to him.

It will perhaps be better to call the monument with which the city of Paris is enriched, the *circular ceiling*, (of the small upper apartment in the temple of Isis at Dendera,) than either the *zodiac* or the *planisphere*.

Compared with our present planispheres, or with the stellar phenomena of the heavens themselves, it abounds with anomalous and foreign matter, and is so far from proving what has been strenuously asserted and repeated—namely, that it is the model whence the Greeks took the zodiac which they have transmitted to us, that it would go far toward proving the contrary. The twelve signs are there, to be sure, but they are not in their celestial* places, nor within the path (as far as we are here enabled to trace that path) of the Sun and Planets,—with respect to which, some of them stand double; nor do they occupy any thing like those regular dodecatemoria of space, which learned writers have asserted the Egyptian astronomers to have exactly measured out by means of the clepsydra; nor have they any very perceptible relation to such of their neighbouring asterisms as the old astronomers have designated to be their decans† and paranatellons; nor could these, or scarcely any other of the asterisms of this ceiling, have circumscribed the same stars of the heavens, which are supposed to be circumscribed by the modern figures of the constellations.

Nevertheless, it is doubtless an astronomical monument well deserving of the most careful study; and from the faces of its figures being all turned the same way, as in a procession (to the westward) does certainly seem to refer to the circular and perennial march of time and the stars. Either this, or the small apartment which was thus mysteriously ceiled, was an arcanum of judicial astrology, and the sculptured figures were employed in their horoscopical predictions;—in that nativity-casting for which, according to Herodotus, the Egyptians were so famous. But as the priests, astrologers, and arrangers of the Egyptian calendar, were one and the same class, it is most likely that the hieroglyphics before us were calculated to answer both of the above purposes.

* Cancer is even placed between Leo and the pole, which is the reverse of truth, Leo having the more northerly latitude; and Virgo, and other of the asterisms, are very disproportionate in dimensions to the rest.—By the way, how came the sign Cancer to be in this instance represented by a *Crab*, unless through Grecian auspices?

† It is true, Visconti finds, or fancies, the thirty-six Decans of the sphere, each presiding over 10° of the zodiacal circle, in the outer circle but one, of these figures: and it may be so intended; but for my own part, I count but thirty-four, unless a Goose, and some other small animals, might be reckoned for Decans; in which case, here are more than thirty-six.

Of the *zodiacal* figures, none are crested, or in any other manner surmounted by the solar orb; but among those of the outer circle, the Ram's head thus crested, occurs in four several instances; two of those instances being nearly under the zodiacal Aries, and another of them on the same radius with the sub-deity, or Genius, whom some have pronounced to be Harpocrates, and who sits above the scale-beam of the Egyptian Libra.

Treating the subject very hypothetically, I should (even apart from my former reasonings) be led to infer that this monument was constructed at some time near the close of the zodiacal reign of the Ram: and it will be remembered that the vernal colure remained in the Ram of the real zodiac, for some centuries after the Macedonian conquest.

The two instances which may be observed of orb-crested rams' heads, nearly under the zodiacal Aries—do they allude,—the earliest of them, to the Sun's entry into this sign or mansion, and the other to lunar time—being the commencement of the vernal, or last, quarter, of that Grecian year which began at the first new moon after the solstice? And, was this contrived in order that when viewed together with the interior, or circumscribed contents of this outer circle, it might afford the means of equating Greek with Egyptian time—through the medium of a common standard of astronomical fact? I should think so; but it must be left to the asterisms themselves to prove it. I suspect that both the zodiacs of Dendera had tabular properties, like the great horologe or chronometer, of Strasbourg cathedral.

It may be remarked, that the one which I have called the earliest, because the westernmost, of the orb-crested rams' heads of the outer circle, is quadrupled; an hieroglyphical allusion perhaps to its four principal stars (*Alpha*, *Beta*, *Gamma*, and *Lambda*), which rose, as is here intimated, nearly with the later stars of the constellation Pisces, under which it is placed. And it may be further remarked, that the other—the single orb-crested ram's head with the little boat beneath—is placed on the same radius or meridian, with the head of the Aries of the Zodiac above; and in Sir William Drummond's outline (though not in that of the Baron Denon) it has the horned crescent beneath the solar disc.

Another of these orb-crested rams' heads (of the outer circle) which is

shewn as if elevated on an altar, is on the same radius with the figure surmounting the scale-beam of the Egyptian Libra. The radius touches also the head of Scorpio, in Sir William Drummond's copy. Now at the season where the later, or easternmost, stars of Aries, set acronically in the latitude of Dendera, those of Libra had risen, and the earliest of Scorpio were just peeping above the horizon.

The fourth instance of the outer circle, exhibits the figure of the celestial Ram complete—his orb-crested head being, in Denon's copy, beneath that of Aquarius. The astral allusion is here less obvious and more uncertain (I think) than in the former cases. When the sun-crown'd Aries was on the meridian, in the latitude of Dendera, the earliest of the stars of Aquarius, were setting (with the latest of Capricorn;—but this, of course, must have been in the day-time; and these latter were on the meridian when, in the crepusculum of morning, the stars of Aries had cleared the solar radiance. The latter state of the heavens is, of these problematical cases, the most likely to be intended by the authors of the monument; and the rather, as the complete figure of Aries is in this instance exhibited, as if walking in the procession to westward. Thus far with reference to the figures which seem to march on the outer circle. All that is within this circle, and above the heads of these figures, seems to bear relation (as I trust I shall be able with readiness and certainty to shew,) to the *Egyptian* mode of reckoning time and regulating the year. These concentric circles being brought together, probably afforded, in the comparative view, the ready means of equation, as is intimated in a former page.

And here I may be allowed to console myself for the discomfort I felt in differing from Sir William Drummond, concerning the mixture of Greek and Egyptian styles of art, by the honour of agreeing with him with regard to this circular ceiling's displaying the celestial phenomena, as it existed at the Thoth or commencement of that Sothic period which last preceded the erection of the temple of Isis. I think this display was further calculated to facilitate the arrangement or disposition of annual Egyptian time; that is to say—to regulate those sidereal years of Egypt, of which the heliacal rising of Sothis was the *term*.

Sir William argues that the point of termination of a Sothic period, or cycle, and the commencement of another, is marked on the monument. He does not insist that the erection of the temple took place at that era, but grants to Mr. Bankes, who has visited Dendera, and whose architectural discernment and critical knowledge of history he highly commends, that it is probably of a subsequent age—later than the former date by some centuries.

My globe with circumvolving poles enables me to submit some corroborating proofs of these facts, of which Sir William, without such means, could scarcely have been aware, unless by his prescience. On the whole—if I do not over flatter myself—my statements will be found to amount to convincing evidence of the following facts:—first, that the Denderanian temple is not of more ancient date than the time of the Ptolemies; secondly, that the *circular* ceiling was the dial-plate (to use a familiar metaphor) of EGYPTIAN *annual* time, bearing meanwhile a specified retrospective reference to the commencement of the Sothic cycle which last preceded the erection of the temple; thirdly, that the sculptured figures of the outer circle were introduced in order to afford the means of a continued comparative view of the Egyptian and Grecian calendars:—Fourthly, that the *oblong* zodiac of the same temple, was, on the other hand, constructed with more especial reference to GREEK time, and the Macedonian march of the seasons; affording a similar comparative view, by means of which to estimate the parallel progress of annual time as reckoned or arranged by the native Egyptians; fifthly, that the *ascertained place* of the *summer solstice* at the time, settles—or goes far toward settling—the disputed date of the edifice; and sixthly, that the Taurine crescent and disc afforded meanwhile a practicable facility of reckoning the procession of the *seasons* according to those primitive notions, and primitive habits of regarding and publishing the celestial signs, which continued down even to at least the age when Virgil treated of the popular classical astronomy.

These zodiacs then—if the above shall be rendered manifest—were very properly, and with a view to the accomplishment of important public purposes, placed in the great temple of Nature as lasting standards of

reference; as affording the perennial means of correcting error and detecting inadvertency, by the correlation of astral facts; of facilitating the operations of memory, or of arithmetic, with regard to time past, present, and to come; of collating and blending the astronomy of the Sabæan creed of Egypt, with the poetic legends of the Grecian calendar; of amalgamating the popular and local variations of all the current calendars of the age, into an intelligible and consistent mass, rich with the gold of science, and sparkling with the splendors of heaven.

After this statement of what I propose to establish, I shall proceed to call my witnesses, of which the principal are, the celestial sphere, the outlines of the Denderanian zodiacs, and an hieroglyphic of the combined phenomena of the summer solstice, of which I have introduced a little further on, an illustrative separate engraving.

I am informed that some foreign astronomer, or astronomical antiquary, fancies and has publicly stated, that he has discovered in those hieroglyphical markings resembling in form the letter T, and which stand near those parts of the outer circle, where the upheld hands of the large figures seem to sustain the ceiling—the *symbols*, and the once *places*, of the *Equinoxes*. I think this a mistake; and am the more confirmed in my thought, as they do not quadrate, in any of the prints which I have seen of this ceiling, with those hieroglyphics in the same circle, which this gentleman supposes to mark the solstices. I should rather first look nearer home. I should seek for the indications of these cardinal points, on the most simple principles and in the most obvious places, by crossing, as I have done, the circumscribing circle, rectangularly, just as it stands in the etched outlines, and, I suppose, in the ceiling itself, with reference to the terminating square.

It is not to be supposed that the *Chartomi* would think of placing the universe, or the hemisphere, so much awry as this gentleman's supposition implies, without some obvious, powerful, and especial reason; and none, that I perceive, presents itself. Those *Chartomi* would naturally arrange the whole, so that the leading lines—that is to say, the places of the colures, should square, and keep the contents of the circle in due symmetry, with the walls of the apartment. This is so nearly self-evident,

that I shall not trouble my readers with another syllable in the way of proof.

Of two crossed lines or diameters thus intersecting each other, drawn through the center of the cieling, and terminating exactly between the upheld hands of the large hawk-hooded figures—one would pass through the sceptre surmounted by a lotus-flower, and through the mitred hawk perched on it, which we may with the greatest probability, suppose to have been the place and the sign, on the Egyptian planispheres, of Sothis or Sirius, and to have been the established line of commencement, or first meridian, of Egyptian annual time, and commonly termed, and acknowledged among the best antiquaries to have been, their *Thoth*. It was this leading line, or *Thoth*, with its hieroglyphical dependencies, as appears to me, which chiefly enabled the initiated, readily to make those comparisons and computations, which were necessary to the co-existing modes of measuring, arranging, and promulgating, time, at Dendera, whilst Egypt was under the government of the Ptolemies.

I am not certain whether our learned countryman, Mr. Hamilton, or Signor Visconti, was the first who discovered that the mitred Hawk was the real hieroglyph of the largest, brightest, and supposed nearest and most potent, of the fixed stars, (*Sothis*;) but it is much to the credit of the mental vision of the author of the discovery, to have seen through the murky exhalations of confirmed usurpation and false pretension, fostered by preceding writers, of the dog *Anubis*. *Sothis*, or *Sirius*,* appears to have ruled that year of Egypt which has been variously denominated civil, or vague, or rural. Not being certain that the generality of readers would understand these phrases—or that I understand them myself, as those who employ them intend—it may not be improper to state that the Egyptians appear to have had an ordained, local, and sidereal year of 365 days and a fraction, of which the *Thoth*, or commencement, was the rising of *Sirius* with the Sun. It was therefore of importance to mark this point emphatically in their planispherical exhibitions; and they marked it in this manner, by a sceptre surmounted by a lotus flower and

* This star appears to have been termed, according to Sir Thomas Brown, *Sothis* in Egypt and *Sirius* in Æthiopia.

mitred Hawk, pointing toward the pole, and consequently forming a meridional line. We may observe the same Sceptre and Hawk in the hand of the young deity, in those small sculptures arched at the top, which Bruce with the utmost probability supposes to be Egyptian almanacks.

Nor are the analogies, which support the hieroglyphical meaning of these connected symbols, of a very recondite or mysterious nature. The bright-eyed Hawk, aptly symbolised the splendour of the Sothic star; the Sceptre, its rule and authority; while the Lotus bloomed along the Nile at the auspicious season of its annual appearance.

Returning to the lines I have drawn, and to astronomical considerations—One of the diameters thus projected, passing through the sceptre, lotus-flower, and Hawk; may be observed also to pass through the Easternmost of the *Gemini* of this zodiac, which agrees with very remarkable exactness, to the state of the heavens at the time of the commencement of the last preceding Sothic cycle, as proclaimed by my globe: for *Sirius* and *Pollux*—I speak here of those single stars of the first magnitude which are respectively known by these names, and which now differ in longitude about 8° —when I remove the Arctic pole to where it must have been at the epocha which has been mentioned by Sir William Drummond, —lie on the same meridian with the utmost precision, as they do on the Sothic radius of this ceiling. Here then, my Lord, is something very like mathematical demonstration, that the centre of the ceiling represents the then pole of the *Equator*, which was nearly midway between the *Kappa-Draconis*, and the *Kochab Shemali* of which I treated in my last Essay.

None of the facts that to my knowledge have hitherto been published, relative to this monument and the era of its construction, are so strong and striking as these:—none of the arguments appear any thing like so convincing. But let us go over the details of the problem or the theorem, that is here involved.

Assuming the *date* which has been laid down by the learned antiquary who is last mentioned, as being that of the commencement of the last Sothic period preceding the probable time of the erection of the temple—

namely, 1322 B. C. and finding by the tables, that the colure of the summer solstice then intersected $13^{\circ}, 20'$, of the dodecatemorion of Leo, I move and fix the brazen colure accordingly. It brings the arctic pole of the Earth or Equator, as already mentioned, to the space between the Kappa-Draconis and the Kochab Shemali. I then, for the *place*, elevate this pole to $26^{\circ}, 15'$, which is the latitude of Dendera, as laid down on Bruce's map. The results are as above stated—that Sirius and the *beta* of the Twins, come to the meridian precisely together, the latter being in the zenith, and the constellation Virgo having so far risen at the time, as to leave the brilliant star *Spica* just beneath the horizon, which again exactly agrees with the line quadrating on this ceiling with the Sothic meridian, as my etched outline will render manifest: for that right line, by dividing the arm of Virgo, cuts off the ear of corn, as does the horizon of the modern globe, under the above circumstances of the celestial phenomena; and if we now turn our attention to the western horizon of the sphere, we find it still coinciding with the phenomena of the ceiling, the quadrating radius passing across the eastern stars of Pisces within a short distance of the Ram.

Time, place, and the state of the material heavens, when brought together by the unerring science of geometry, being in these results, found to be in exact accordance—the conclusion cannot reasonably be withheld: Your Lordship will grant that we have discovered the Sothic meridian, and equatorial pole of the ceiling, and that both agree in ratifying the date of 1322 B. C.

But if we should further discover that, the celestial phenomena, as displayed by the *oblong* zodiac, belong to a subsequent period, it will follow that the date of 1322 B. C. belongs (as I have stated) *not* to the epocha of the foundation or dedication of the Denderanian temple, but to the commencement of the Sothic period last preceding that epocha: for though Astronomy does often travel backward—and the more remote, the more valuable, are her observations—yet she has never been known to step forward to commemorate anticipated dates by means of the art of sculpture; nor would the Egyptians of 1322 B. C. (an era when that nation was in the plenitude of its power), have condescended, had they been able, to think of advert-

ing to future modes of estimating Greek time, and registering them within their own temple of Isis. Danaus was, about this period, wandering in search of a settlement, or had recently effected one at Argos.

Now—to revert to the *oblong* zodiac—at the epocha when Sirius came to the meridian with the brilliant beta of Gemini—(the latter being in the zenith at the time)—it must have risen heliacally with the larger stars in the neck of Leo. This oblong zodiac cannot then refer to the same remote era with the circular ceiling, because the Sothic symbols—the Hawk, Sceptre, and Lotus—are here found at a considerable distance from, and not even on the same plat-band or fillet with, the sign Leo: in short, are shewn as being at a certain distance above the horizon, while Leo is entirely beneath it.

In the outline which Major Hayes has drawn for Mr. Hamilton, these Sothic symbols are conspicuously placed, within a hieroglyphical boat's length of Gemini, which gives us to understand that the Dog-star (Sirius) did not at the time specified, rise with Leo, but with some of the stars of Cancer, and brings us within sight of another concurring and very remarkable circumstance.

Not the star Pollux, the *beta*, but Castor, the *alpha*, of Gemini, is in *this* zodiac represented as being on the Sothic meridian. From whence is this inferable? (I shall be asked.) From the westernmost of the Twins being sculptured with the head of a dog, surmounted by an orb or egg—I am doubtful of which is intended, but no matter,—whichever is meant, it is an hieroglyphical allusion,—resting on an obvious natural analogy, and on the Greek construction of Sirius,—to the Thoth of the Egyptian, or Sothic year: which, notwithstanding it had formerly—namely, in 1322 B. C.—commenced from the Eastern Twin, now commenced from the Western: that is to say, Pollux was no longer in the zenith when the Dog-star came to the meridian, but had been superseded, in the course of the time that had elapsed since 1322 B. C. by Castor. The hieroglyphical record, if I have rightly construed it, amounts in short to this:—Sothis, the *dog* of the Greeks, now rises heliacally with some of the stars of Cancer, and arrives at the meridian of Dendera with the *alpha* of Gemini.

Returning to our customary criterion, the sphere, I here move the brazen colure of the solstice accordingly, and I find that to bring Castor and Sirius to the meridian together, I must move it till it cuts the ecliptic near the point of separation between Cancer and Leo, and passes over the star *beta* in the claw of Cancer, which very nearly agrees, in regard to time, with my conjecture formerly expressed, of the superb temple which contains these monuments having been erected by Ptolemy about two centuries and a half B.C. But as it still more nearly touches the point of time of the Macedonian conquest, it may well engender a suspicion that the era of that very event may here be astronomically recorded; as appears not unlikely that it should be, if we suppose this to have been in the first great temple erected under Grecian auspices. Here then is a further symptom of compromise and conciliation between the Egyptian priesthood and the Greeks, who might, with mutual consent, as with reciprocal pleasure and profit, display—the former, the reign of Sothis on their circular ceiling—the latter, in their oblong zodiac, the era of the ascendancy of Macedonian power.

The celestial phenomena then, and the hieroglyphics of the two zodiacs, so far as I have yet ventured on their interpretation, are found to be in perfect accordance. But our attention is further claimed by other phenomena and other hieroglyphics, as well as by the differences between the respective draftsmen who have delineated the zodiacs, and by those of the learned antiquaries who have interested themselves in their explanation.

Two etched outlines of the zodiacs are now before me, which differ in some particulars. One is copied from Denon, and is in the *Philosophical Magazine*, vol. xiv. The other is introduced in Sir William Drummond's *Essay on the Zodiacs*. As they stand inversely, it is necessary for me to say, that I take that in the *Philosophical Magazine* to be properly placed, and Sir William's to be upside down—that I may be understood when I speak of the upper or under plat-bands or fillets.

The upper plat-band consists, as I understand it, of those constellations which were above the horizon at the time specified; the lower, of those which were beneath it. And it has been agreed that the two scarabæi which are placed near the right-hand extremity of the zodiac, stand

for the sign Cancer, one being placed on the upper, the other on the lower plat-band.

Sir William Drummond, coinciding with Mr. Hamilton, says that "the sign Cancer is indicated by two scarabæi, and that the division between them marks the *Sun's place* at the *Summer solstice*:" yet he says, "that the exact relative proportion between these two scarabæi should have been preserved by the artists, can hardly be expected." But why not? If Cancer (the scarabæus being regarded as the true Egyptian representative of these stars) was divided into *two* beetles, in order to convey meaning, surely the *Chartomi* who superintended the construction of this zodiac, would take care to see that this meaning was as accurately conveyed as their hieroglyphical means admitted. Sir William's artist may inadvertently have enlarged the upper scarabæus of his outline; but I do not imagine that such want of advertence could attach to the astronomical priests of Egypt; and I give superior, though not implicit, credit to the much smaller beetle which appears in the outline of Denon, not only for the above reason, but because I find it in superior agreement with other reasonings on which (I conceive) the date in question must finally, or principally, rest; and because I am not sure that the difference in the dimensions of the beetles was intended, as has been supposed, to specify the point of the ecliptic then touched by the tropic of Cancer.

It seems necessary here to write with reference to some precise time, and we have seen that at the era of the Macedonian conquest, the colure of the solstice passed nearly through the point which separates the dodecatemoron of Cancer from that of Leo; according to the real zodiac, it cut nearly across the star *Beta* in the south-western claw of the Crab, which the comparative dimensions of the two Beetles, as the Baron Denon has exhibited them, would give us to understand; for the larger Beetle—admitting for the present its meaning to be as has been represented—must imply that the greater proportion of the stars of Cancer are still beneath the horizon with Leo; consequently, that the sculptured figures of this oblong zodiac, refer to the stars they were severally supposed to circumscribe—that is, to the real, and not to the sophisticated zodiac, or dodecatemorial spaces:—the crescent and disc on the back of

Taurus affording at the same time a practicability of pursuing a mode of reckoning applicable to the march of the seasons, from another starting point, and according to a more ancient and popular mode of reckoning, connected with the close of the annual rites of Osiris.

I have written above with some doubt of the meaning of the larger Scarabæus, because, though I suppose it to be stellar, I hold it to be questionable whether it is also Greek, or Egyptian? or Solar, or Lunar, or both? The ordinary Grecian year began, we must remember, at the first conjunction of the two greater luminaries which took place after the Sun's arrival at the summer solstice.

I shall proceed to shew, as connected with this doubt, why I suspect the Scarabæus to be not only a zodiacal sign, but also an hieroglyph of the conjunctive Sun and Moon: and why, of the two which here present themselves, one may denote a solar eclipse which took place—as we may *perhaps* find sound data for supposing—early in the afternoon of Midsummer day, the Moon being at the time at her ascending node in the sign Scarabæus, now called Cancer.

That a Scarabæus might be hieroglyphically used to express an eclipse, I was first led to suppose at Belzoni's exhibition: (Mr. Hay, who wrote on the Colchester sphinx, being present and commending the discovery.) The meaning, I thought, was conspicuously displayed on a wall of his model of the whole sepulchre, which was opposite the spectator, as he descended toward the chamber of the alabaster sarcophagus. The eclipse, expressed by a large beetle and disc, was, I think, in the second apartment.*

And when we come to consider the abstract form, or general outline, of a beetle, and compare it with that of an eclipse, supposing the two orbs or discs to be shewn in transit, as we commonly represent them in our modern almanacks, they bear no inconsiderable resemblance; and this resemblance is increased, when we reflect that in nature the interposing Moon or penumbra, is commonly seen of smaller apparent dimensions

* I regret that a monument so valuable, and brought hither with so much care, as this wonderful sepulchre, should not have found here a permanent station. Could I have had opportunity of *studying* it, I might have found reason to change my opinion. *My* eclipse might have gone off, and I might have seen in the beetle and disc of the sepulchre, only the solstitial Sun.

than the disc of the Sun.—Again, we might ask, would not the Egyptians, who made so little ceremony of inflicting hieroglyphical decapitations and dismemberments, have cut their Scarabæus in two, rather than have presented us with two Scarabæi, if they had meant here to signify that the Sun had passed through any given portion of Cancer? But in truth, they *have* omitted part of his right wing according to Denon, and the whole of it according to the outline published by Sir William.

I believe Horapollo has made some kind of mention of a sculptured Scarabæus, indicating a conjunction of the two greater luminaries: but I cannot say that in general I rely much on Horapollo. There is too much of pompous affectation in a monk's assuming that high-sounding classical appellation; and he so often mentions as hieroglyphics, things that are never seen among the Egyptian sculptures, that I regard his writings on that subject as little better than romance.

If we recognize the small Beetle as denoting that a Solar eclipse came on in the afternoon of the day of the solstice, and the large winged Beetle of the inferior half of the zodiac (of which Beetle the whole is presented to view excepting his right wing) as denoting that the far greater part of the stars of Cancer had yet to ascend, or were beneath the horizon at the commencement of the year, we may obtain and carry on a consistent meaning. In this case the small Scarabæus signifies an eclipse on Midsummer-day, and the large one is the Constellation according to the Egyptian mode of representing it.

You will please to observe that the smaller Beetle appears to be just crawling into the *solar radiance*, as if to denote that the eclipse came on soon after the Sun had passed the meridian: and crawling from the *westward*, because solar eclipses always come on in that direction. Yet after all, and notwithstanding what has been written by Horapollo and myself, I should add, put not your trust in Beetles, as emblems or hieroglyphics of solar eclipses. The fact is not proven, but only rendered probable: and Mr. Hamilton may yet be right in his announcement of the smaller Beetle as denoting the *proportion* of the sign Cancer which had ascended from beneath the horizon at the epocha commemorated by this monument.—But I shall presently submit a third interpretation.

Where I am sceptical, I can but write with corresponding uncertainty.

For stating our "sceptical doubts," and "sceptical solutions of those doubts," we have at least the authority and the example of Mr. Hume: and reasons are not wanting—resting too on sound analogies—for our supposing that the scarabæus *may* have been the *Egyptian* emblem or hieroglyph of the *Solstitial* sun.

The chief of those reasons, as far as they are known to me, are, that when at Midsummer the Sun arrived at the tropic of the Beetle, as we may term it, this insect appeared to possess the power of turning it back, in the same manner as it is said to roll away its own egg by means of its hinder feet: and it is known that the Greek word *Tropic*, which doubtless had a corresponding expression in the Egyptian language, literally signifies, the point of *re-turn*.

But another doubt occurs to me here, which it would not be honest to cancel. Leo is near the feet of that long and distorted figure embracing the space from solstice to solstice, which I suppose must be meant for a personification of the half-yearly path of the Sun,—a single figure only standing between; whereas Gemini is twice as far from the feet of the other half-yearly path—the space being filled by three peopled boats. This does not look as if nearly the whole of Cancer were *beneath* the horizon; neither does the sign Capricorn being introduced in the inferior half, agree to this account; for why should Capricorn be in the lower half, unless Cancer were in the upper? What if the two Beetles then should be intended to signify what we now, by means of measured degrees and numerals, denote in another manner? What if the two zodiacs—the fixed and the moveable—were, in effect, known to the edifiers of the Denderanian temple, and are here, in effect, disclosed to the initiated adept?

I continue to profess doubt and obscurity on these points, which the sunshine of other minds may dispel; but am now arrived within view of a beacon which, with good steerage on our part, may guide us to a just conclusion concerning them.

Respect for the learned antiquaries who are named above, and for others who are not named, has detained me—I can only hope, not quite too long for the reader's patience—in this place, confessedly of doubt and

difficulty. The truth is, I felt too much deference for travelled learning and urbanity, and was too grateful for what has been achieved through danger and peril, to advance a single step without the actual draftsmen and inspectors of the monuments, unless authorised by some call or order more powerful and warranting than my own voluntary devotion to the subject: nor could I, even under circumstances more flattering and encouraging than mine have been, have *advanced* at all, till I had given the fairest statement, and granted the fullest weight to their arguments and observations.

The public call just now is loud, not to say imperative, upon all who have gotten in any degree beyond the surface of the subject, and I must so far yield to it, as to venture on the statement of rather a bold surmise or two, for an antiquary of humble and untravelled pretensions, even though it should subject me to the courteous retorts or the "civil* triumphs" of those who have been in Egypt.

The circumstance of the upper scarabæus of the oblong zodiac having been so *variously* seen and represented by the Egyptian draftsmen and travellers—(chiefly by the Baron Denon, by Sir William Drummond, by Mr. Hamilton, and Major Hayes)—combined with other circumstances which, after beating about for a time, had found anchorage in my mind, have led me to suspect that this scarabæus, *as it has been called*, was in reality meant by its authors for a *Crab*, and that when combined with the lower scarabæus, which is unquestionably a well-sculptured *Beetle*, they are intended hieroglyphically to express, what might be expressed in words as follows:

The *Egyptian* symbol of the sign $\overline{\text{O}}$, is a *Beetle*; the *Greek* symbol is a *Crab*. A beetle is therefore placed on the nether band of this zodiac, to shew that according to an Egyptian mode of reckoning time, and recording the transits or mutations of celestial phenomena, the far larger portion of this asterism was beneath the horizon; on the contrary, according to the Grecian mode, the far greater part was above it:—the

* "You have been in { France } said my gentleman, with the most civil triumph in the world."—*Sterne's Journey*.

blank line of demarkation between the two plat-bands, being that of the horizon.

Of course this hypothesis, or *new reading*, assumes a disregard of the circumstances of those relative dimensions of the representatives of the sign, which have hitherto attracted, and perhaps too much engrossed, antiquarian attention,—and looks only at their difference of *form*, which in the present case is very manifest, the Beetle being much more lengthened, and in short, exactly like the great golden Scarabæus (or beetle of Egypt); while the Crab, like that marine creature, is short and round, particularly in Major Hayes's delineation. Of the three species of the beetle tribe, that are more or less common in different parts of Egypt, neither has this round and crab-like form. Let us reflect. In the formation and delineation of the zodiac, relative dimensions appear clearly to have been put out of the question. If the Scorpion of the zodiac be larger than the Ram, or the Centaur, why should the Beetle and Crab be expected to bear or retain their natural proportions?

Of the above statements or hypotheses, the reader will prefer that which brings with it, or leaves behind it, most conviction. We now arrive at another hieroglyphic, of which I can write with more certainty, and whose agency may perhaps assist us in dispelling any doubt that may yet remain, with regard to the two beetles, or beetle and crab. I shall first lay down my proposition here, without reserve, and immediately proceed to adduce my proofs.

The place of the Summer solstice, which antiquaries have hitherto employed their minds and pens in discussing or discovering by inference, is marked in this Denderanian exhibition of the zodiacal phenomena, by the presence of the SUN HIMSELF.

Some readers may feel as great surprise at this announcement, as I felt when I first discovered that the Sun at noon-day had hitherto escaped all notice from the modern Egyptian students. But I must proceed to explanation.

At the termination of the upper double row of figures—those which proclaim what we now call the winter and vernal quarters of the year—there is a very interesting, significant, and beautiful, hieroglyphical com-

SOLAR HIEROGLYPH from the oblong ZODIAC at DENDERA.



bination, of which I have not heard or read of the least notice, notwithstanding that to be recognized, it needs but to be seen and named. It consists, as exhibited above, of a circular disc, which is sculptured at the termination of the upper row of boats, and appears partly to cover the last of them: it is larger by one half, than the winged orb of the winter tropic, which is sculptured at the other extremity, which implies that it is the summer sun; and is stationed,—no doubt, precisely at the then place of contact of the ecliptic with the summer tropic—near the smaller beetle or crab. A succession of small triangles, or pencil of rays, beam from it on a crowned head or face; beneath which is a gate, or door-way. It is, *the SUN irradiating the face of NATURE*, at the solstitial season.

The circular disc, is the Sun, “riding at his highest noon” on Midsummer-day: the rows of small triangles radiating from this central orb, (which, I would add, are twelve, if the numbers did not vary in the different copies that I have seen) express the emanating solar influence; and the *face of nature*—which is even now one of the most colloquial of metaphors—is expressed by a front view of the head of Isis, the cow-eared deity of the Denderanian temple, which is seen immersed in the solar

rays. The symbolical gate below, is the portal of those infernal regions which the Sun was fabled to enter when he quitted the upper hemisphere. A more intelligible hieroglyphical combination, or one more obviously selected from the "pictured urn" of "bright-eyed Fancy," I have not yet met with. It exists, and is held together, entirely by poetic analogies, resting on the firm basis of permanent existence. I think we need entertain no further doubt that the place where the tropic of Cancer touched the ecliptic, is clearly meant to be specified by this interesting hieroglyphical exhibition of the solstice itself.

And now we arrive at a recollected circumstance, which, if I mistake not, will greatly tend to increase our conviction that this Denderanian temple *was* erected under Grecian auspices, and that these zodiacal plat-bands were dedicated to the Grecian modes of reckoning and distributing time: It is the well-known fact mentioned in page 255, that *the Greeks began their Lunar year at the Summer solstice*; or, to write with more precision, they commenced or dated it from *the first conjunction of the two greater luminaries which took place after the Sun's arrival at his solstitial noon*. Nor did it matter to this commencement, whether the conjunction was an eclipse:—I am now merely alluding to the general rule as recorded in the "*Archæologia Atticæ*," and to its remarkable correspondence with the Denderanian sculptures. The boats which are sculptured beneath the zodiacal plat-band (as has been observed by others) do not correspond in number with the monthly division of Grecian time, which, unless History, in her aversion to Science, has made a mistake here, was into periods of ten* days each, or we might probably thence have been led to more accuracy in our means of computing *by Lunar time*, the era of which we are in quest.

* There may be more accurate and more certain records of the Grecian calendar than I am acquainted with; but if we count the 3 boats that stand between Gemini and the solar radiance, and the fractional parts which stand at the extremities of the lower row, here are 44 or 45 boats, which correspond in number with the ancient *ogdoadical* division of time; for there was a Greek lunar year consisting of 354 days, and if this be divided by 8, it will appear to account for the number of complete boats in the zodiac, and ogdoads in the year, (44), while the fractional remainder may be thought to bear reference to the imperfect boats.

Solar and *Stellar* time, however, may be thought to bring us sufficiently near for an antiquarian speculation; and I may be permitted, in the way of summary, to repeat, that the epocha commemorated, is that when the power and grandeur of Egypt and her Persian possessors, were overshadowed by those of Alexander and his legions. This, must have given peculiar and impressive pertinence, and awful efficacy, to the eclipse, if it really took place—(which I am not astronomer enough to calculate)—at the very commencement of the year of the Macedonian conquest.

Whether so or not,—the time, as we have seen by comparing the sphere with the hieroglyphics, was, when the stars Sirius and Castor came to the meridian together; when the summer colure passed through the *Beta Canceris*; when the tropic of Cancer touched a point which brought the dodecatemorial space allotted to this sign, above, while nearly the whole of its stars were beneath, the horizon.

And this was the important era of the Macedonian conquest. Let us now reflect, that to erect such a temple as this of Isis, must in all probability have been the labour of several years. How should its architect foresee, so as to commemorate by an astronomical display, the time of its completion? The Cathedral of St. Paul in London, was thirty-six years in building; that of St. Peter at Rome, was one hundred and thirty-five! Nations, like individuals, have in all ages sought to connect religion with their military successes. The Ptolemies would naturally wish to perpetuate the willing or reluctant subjection of Egypt, by gilding her chains, and would date their grateful devotion to the great Goddess, from the era when *she consigned* her sincerest votaries to the parental care of their Macedonian masters.

J. Landseer fecit, from an Impression of the original Cylinder in the Cabinet of Sir W. E. Rouse Boughton Bart.



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ESSAY VIII. TO SIR W. E. ROUSE BOUGHTON, BART. M.P. F.R.S. &c.

DEAR SIR,—The engraved cylinder of Jasper-opal which you obtained in Syria, appears to me to be one of the most extraordinary that has yet been brought from the East,—whether we regard its precious material, the care with which it is executed, or the mystic subject matter of its engraved contents. I had the honour of submitting my first thoughts concerning it, containing little more than a brief outline of the present dissertation, to the judgment of your late much respected father, Sir Charles Rouse Boughton; and to his approbation, always attended by sincerity, I am much indebted for the impulse, which under no very smooth or favourable circumstances, has carried me onward through the more arduous studies which have been requisite to the production, not merely of the present essay, but of those also by which it is accompanied. To his high attainments in Oriental literature, and his frankness of communication, my best acknowledgments were due. They are now become yours by reversion. Accept, with them—I beg of you, Sir William,—my sincere thanks for the loan of the opal cylinder, and other interesting antiques

with which you have favoured me and forwarded the object of my researches.

Notwithstanding the circumstance of your having obtained this curious monument at Antioch, and that it is the production of an artist of talent superior to that which is displayed on some other cylinders of a similar kind, yet it is obviously of the same origin—that is to say, belonging to the same Sabæan superstition, with those which my friend Capt. Lockett, and his fellow travellers, Mr. Rich (the British resident at Baghdad) and Dr. Hine, collected on the site of Babylon.

To the same superstition it may well be supposed to have belonged, as that ancient Sabæan faith in the stars, is well known to have reached from the lands of Nimrod and of Jemsheed, westward through that of Canaan, to the shores of the Mediterranean; southward to the straits of Babel-mandel and the Erythrean ocean; and northward to the farthest extremities of Scythia. It may therefore have fallen into your possession, not far from the place where it was originally engraven, and used as a signet: Sidon, in this immediate neighbourhood, is repeatedly alluded to by Homer as a very ancient seat of art:—yet I do not recommend the too ready adoption of this conjecture, as I purpose eventually to examine what latitude accords best with the celestial phenomena of which we here behold an hieroglyphical display; a criterion which you will probably regard as more satisfactory.

Among the most remarkable and conspicuous of its engraved contents, is certainly that winged orb, disc, or circle, with a radiance emanating downward, which in the impression, and in that faithfully enlarged copy of it which forms the head-piece to the present essay, stands at the upper left-hand corner, immediately above a very singular and curious graphic figure, of which I shall proceed to treat next after the winged orb.

In this winged orb, we arrive at one of those hieroglyphical and antique facts, which have not been liable to the lapses or the mutations of language. To whatever other accidents it may have been exposed, it has not, like language, been “subject to the tyranny of time, or the capricious innovations of fashion.” Notwithstanding that it is obviously of very remote antiquity, it is what it ever was, excepting a few slight

fractures. And since it is the production of an unsophisticated age, we might flatter ourselves that it could not easily be misconstrued or misunderstood, had not our more extended experience taught us that we can safely rest such inferences on the mathematics alone, and obliged us to acknowledge that sculpture is only less fallible and less mutable than derivations from the language of unorthographical ages, and less liable than the language of any age, to be used intentionally as a mean of deception. But in the instance before us, we shall perhaps eventually find that the Muses of Sculpture and Mathematics, true to their harmonious sisterhood, will present themselves hand in hand.

We have reason to distrust an old mode of research, since it has not unfrequently led us to incompatible conclusions, and to some that are even absurd and ridiculous; discovering a new one—one that is allied to fine art, and to the surer sciences of geometry and arithmetic—we follow it up, in the hope that it may prove less fallacious than the old, and that the obscure spots in history and chronology—or at least some of them—may hence derive elucidation.

It is, I think, clear enough for me to set out with assuming, that the *primitive* winged orb of the Sabæan superstition is that which we find sculptured on the present, and which occurs on other of our antique cylinders; for had it been derived from that which is so frequent among the sacred sculptures of Egypt, the wings would have more evidently been designed to imitate those of a bird, and would have less resembled the wings or sails of a modern windmill. The *Babylonian* wings, of which other examples will follow and confirm the style of the present, are obviously—not to be understood as a bad imitation, or as an imitation at all, of those of Egypt, but are—either the offspring of a less perfect conception existing in the minds of the Phœnician and Babylonian artists, who, infant-like, were but beginning, or learning, to see things as they really are; or, perhaps, conceived in mystical simplicity, they may have been designed to express wings composed of sun-beams, and therefore *appropriate* to the Sun, as denoting that light was either its moving power, or was produced by its motion, or was of that supposed motion the invariable concomitant. Astronomers still say, in a technical sense,

that the Sun's rays reach to a certain distance, and compute their heliacal risings and settings of the stars, accordingly; allowing from ten to fourteen degrees, according to the climate, as the space in the heavens in which a star of the first magnitude gets clear of the solar radiance. That the symbolical wings had an original reference to this reach of the Sun's rays, would be no unreasonable, nor very mystical, hypothesis.

From comparing these with the winged orbs or discs of Egypt, sufficient data are not afforded, for us to pronounce definitively, whether the Sabæan cylinders are of more remote antiquity than the Egyptian temples, (speaking generally of those Egyptian temples which are now extant), since (as before intimated) we cannot be quite certain whether the radiating wings are the offspring of imperfect conception, or of refined symbolical meaning. I strongly incline to the opinion that the temples are the least ancient; but the two sorts of wings may possibly have been contemporaneous in the different countries, for national styles of art have always differed, and we cannot suppose that the religion and the sacred symbols of all the star-worshipping nations, was in all respects alike, and that the Sabæism of Babylon and Phœnicia, exactly resembled that of Æthiopia, that of Persia, or that of Egypt; the contrary being evident from the religious wars which are recorded in the early scriptural, and in the Persian, histories. If there were points of agreement, there were also points of difference; and the sculptured symbols which were in sacred use, would of course differ with the differing dogmata, as well as with the national schools, or styles, of design.

The winged globe of Egypt, with its aspic addition at either side, as we in such numerous instances see it sculptured over the entrances of their sacred edifices, may, or may not, have had the same meaning as on our engraved cylinders. In all probability it had the very same in Canaan, Egypt, Persia, and throughout Asia, wherever we behold this remarkable hieroglyphic: but this we are not at present called upon to shew, and the less so, as, having been much disputed, it might lead to a wide dissertation. Without this, I foresee quite enough danger of my being led into digressions that may require apology.

In Persia however,—at Nakshi Rustum, and at Persepolis,—the sculp-

tured orbs or discs, with their winged and radiant accompaniments, are also found; and, what is remarkable, these accompaniments possess at the former place, the same peculiarities of form with the symbolical wings of Babylon and Canaan; while at Persepolis the wings are rounded at their outer extremity, more like those of a bird, and like the sculptures of Egypt. This, when combined with the circumstance of the appearance of the arrow-head character on the cylinders, bricks, and sculptured palaces, of Babylon and Persepolis, shews ancient and intimate connexion between the two nations.

The bust of the Persian monarch rising from the winged circle, in the interesting relievos of the latter country, when coupled with the circumstance of its being thus exhibited on the *sepulchral* monuments of Nakshi Rustum, would seem at the first glance to indicate, to minds habituated to the classical notions of hero-worship and deification, that an apotheosis is, in those instances, intended by the artist. The downward-proceeding radiance, similar to that which is sculptured on the present cylinder, must in this case be understood to be meant for the glory of the deceased and ascending monarch: so, at least, might have been supposed; and I might have inadvertently supposed so with the rest; but Sir Robert Porter having (as I just now perceive) delineated these sculptures with much more ability than any preceding traveller, has occasioned me to reflect deeper, and to castigate all my classical prejudices of the kind. I think it may now be unequivocally seen, that in those Nakshi versions of this device, where the face of the exalted personage is turned from the orb of the Sun, and toward the officiating priest, (if for priest he be intended)—that that radiant personage is *descending*, and as these monuments were, not improbably, like the pyramids of Egypt, prepared and ordered to be sculptured, each by the monarch himself whilst living, who after death was entombed within,—the spectator is simply, but impressively, informed, that the deceased tenant of the sepulchre, descended from the glorious deity to whom the Persians (then called Irânians), and the Sabæans in general, offer sacrifice,—as the blessing and reward of their piety:—or it might be understood to be in celestial compliance with the prayer of the pontiff or archimagus who stands before the altar, for this

idea would connect religion with royalty; and the present, with the future, purposes for which the Persian monarchs would gladly employ the art of the sculptor; while each of those monarchs in his turn might hope that the veneration of posterity, would succeed to the loyal and living, love and obedience of his subjects.

As Sir Robert Porter has remarked, the volant and crowned figure of Nakshi Rustum appears "as if it had issued from the Sun." And in the case of the sculptured portals of Persepolis, the winged and beaming figure above, being the very miniature of the monarch below—they seem conjunctively to say, in the language of sculpture, *He who now walks the earth and reigns below, emanated from the great solar deity who reigns above. Behold a glorious patriot king, shedding radiant blessings!*

You perceive, my dear Sir, that I cannot have the pleasure of agreeing with Sir Robert, that the figure above is meant for the *Ferwer*,* ghost, or second self, of the figure below. I much question whether such an idea, or the least notion of such a thing, had obtained, in the very early ages when I conceive these Irânian monuments to have been erected; for I believe them to be much older than Sir Robert Porter has supposed.

How common it has been in the East, for the priesthood and the people to style their monarchs "descendants of the Sun," as we of Europe write "*Dei Gratia*," is pretty well known: yet I shall presently return to considerations connected with the antiquity of this custom, it being an indispensable part of my argument.

The learned and critical investigations of Capt. Kennedy and Mr. Erskine,† have shewn that the Persian *Desâtér* is by no means of the remote antiquity, or the intrinsic importance, that had been supposed by Sir William Jones; but it may still be believed to contain some passages from the traditional creeds and the liturgies which long preceded the introduction of Islamism; and when it falls in with sculptured evidence, may be listened to with cautious credence. That "whatever is on earth,

* For an explanation of this Persian term, and Sir R. P.'s account and delineations of the sculptures of the Persepolitan portals, see the 1st vol. of his Travels, pp. 657-9.

† These masterly productions are lately published in the second volume of the Transactions of the Literary Society of Bombay.

is the resemblance and shadow of something that is in the sphere,"* appears to have been a dogma belonging to an ancient faith, coeval with the Persepolitan portals: and as the Persian monarch was supposed to have issued from the solar deity, so he was believed to *resemble* that from which he issued, by analogies so close and visible, that sculpture might express them, in full reliance that Persia and posterity would not fail to recognise and understand them.

And these analogies rested on the permanencies of the celestial phenomena, and of the science which explains them. Fortunate (I may be allowed to call it) for my researches, that the planets, and their revolutionary movements, are ever the same. The Sun is perennial, and no man shall say, as of sublunary matters, "peradventure he sleepeth," &c.

Hence, as the Irânians saw and sculptured their solar deity, as radiant with glory, and as appearing to revolve in an orbit; and since Astronomy had taught them (in reference to this orbit) that he was surrounded by a circular belt or zone—the apt symbol of his real zodiacal, annual career; so, the heaven-descended monarch—"the King of Kings"—was symbolized to beam also with glory, and when represented by the art of the sculptor, was begirt with a similar belt or zone.

It would be easy to shew, from sculptured documents often repeated, that this circular zone, with a certain appendage of riband streamers, continued for many centuries—from the Sabæan ages, even down to the close of the Sassanian dynasty, or later,—to be an important and highly venerated article of the *regalia* of Persia, acting precisely the same part in their ceremonies of inauguration, that the jewelled orb, surmounted by a cross, does in the coronations of Christendom.

That the symbolical zone or circlet, with its riband streamers, further gratified the ambition of the Persian sovereigns, by inculcating that they resembled the Sun *at the season of his greatest power*, or intensity—that

* Desâtêr, v. 35. It is curious that this doctrine, and some other, supposed to be of the ancient Irânian religion, should have been revived in Europe during the last century, by the Baron Swedenborg, who in all probability never could have seen the Desâtêr, nor presumptively have read the Pehlivi language.

is, at the summer tropic—I shall not take upon me to pronounce. They might, or might not, symbolize so far, or refine so much. But I undertake to prove, that the winged and radiant orb of our interesting cylinder, is intended for the Sun at either the summer or the winter tropic. Yet as mere announcement in such a case amounts to little, and might possibly remind you (Sir William) of the vaunt of Owen Glendower, I must hope you will not find the steps which have led me to this conclusion, tiresome to follow or destitute of interest.

Whatever may have been meant by the winged discs of Egypt, or those of Persepolis, other reasons may be adduced to shew that the sculptured and volant orbs of Canaan and Chaldea, can have been intended for no other than the Sun himself, the chief deity of Sabæan veneration; and to these I shall next proceed to advert.

It would appear from general evidence afforded by history, that, as people of the present day variously denominate the Deity, by the words, God, the Lord (of heaven), the Almighty, &c.—so the astronomical priests, used—perhaps with local references to places and dialects—more than one solar title; sometimes pronouncing the Sun to be *Molech* (or the king); at others *Baäl* (or the Lord); at others and in a later age, *Mithra* (or the Saviour), occasionally with such additions as served to denote his stations in the zodiac at particular seasons* of the year; and again at other times or places, they called him ADAD or *Hadad*—that is, the *One Supreme*, or more literally, the *One alone*: but, we must bear in mind here, that what is supreme, being without co-equal, must be alone. Parkhurst derives the word in question from the Chaldean ܗܕ,† *Had*—

* As Baal-ammon, Baal-thurz, Baal-ath, Baal-samin. † Hebrew Lexicon, p. 351, where, and in the Ancient Universal History, may also be read, that Adad is the Assyrian name of the Sun. I believe that, by most linguists, our word *God* is thought to have grown from this oriental root; which is pronounced by the Arabs hard, or as if a *G* or a *C* stood before the *had*. With ringing the changes upon Adad, Hadad, Chodad, Achad, Ghad, Gad, &c. we might easily amuse ourselves for a full half hour at the least, “by the *Blenheim* clock:” but you, Sir William, would justly consider this sort of literary fal-lal, as the mere husks and shells of learning. There is a swinish multitude of book-men, who may find them excellent food: but when we crack a joke or an hypothesis, having gotten at the kernel, we throw away the shell.

that is *The ONE*, which being repeated, means—the *One alone*, or *only One*;* evidently because the Sun shines alone:—because, when he appears, all other stars “hide their diminished heads.”

This literal meaning, which I shall presently apply to the volant and exalted orb of the opal cylinder, accounts at the same time for the kings of Damascus, or Syria Libania, assuming the cognomen or appellation of Adad, or Hadad; as in Ben-hadad (i. e. the son of Adad) and in Adad-ezer (the contemporary of Solomon). The most powerful of the ancient kings of Edom (or Idumea) were also Adads, as we read in the first chapter of Chronicles;† and the father of the queen of Sheba, who honoured Solomon with a visit, was also an Hadad.‡ All were presumptively autocrats—i. e. sole and absolute, or aspiring to be so, in their respective dominions.

Unless we might regard this pompous and high-sounding style, where it has been assumed by royalty, as a perpetual stimulus to *be* godlike, by acting up to its assumptions—as the announcement of a perpetual promise of lofty aims on the part of the sovereign—it can be considered as no other than a very ancient contrivance of the Idumean and Canaanitish kings, to superinduce a species of sacred worship, on sublunary allegiance. To the selfish aspirant after, or the ignorant and indiscriminating possessor of, absolute power, what so gratifying as to be looked up to as the *One shining alone*?

It is curious, at a period so much later in the history of the world, for us to have discovered that this assumption of divinity has not been

* Since writing the above, I observe that Cicero causes Balbus to offer the very same reasons as authority for the Latin name of the Sun. “The Sun (he says) is named *Sol*, either because he is *solus* by his pre-eminence above all the stars, or because he obscures all the stars, and appears *alone* as soon as he rises.”—*Nature of the Gods*, B. 2.

† “When Husham was dead, *Hadad* the son of *Bedad*, which smote Midian in the field of Moab, reigned in his stead,” ver. 46; and again in ver. 50, “When *Badl*-hanan was dead, *Hadad* reigned in his stead.”

‡ Volney’s “*Researches*,” vol. ii. p. 38. Corbett’s translation. M. le Grand, too, in his “*Dissertation on the Queen of Sheba*,” says, that even the Abyssinians, who claim her for *their* queen, “affirm that she was the daughter of *Hadad*, king of the Homerites.” The queen herself bore the appellation of *Bel-kis*, which also is of Sabæan reference.

confined to the oriental hemisphere. If the chiefs of Tyre and Carthage were Itho-baâls, Ath-baâls, Hanni-baâls, Asdru-baâls; if the monarchs of Persia, Edom, Syria, and the Homerites, were Ben-hadads; the royal family, or Incas, of Peru, were synonymously "Children of the Sun;" and those who are versed in the northern languages, probably know that the Runic Bâl-dur is to the same purport.

Of the signet of one of these Ben-adads or descendants of the Sun, or of some Irânian or Median* king (as I should rather conceive) who made the same lofty pretensions, it appears to me that Mr. Rich has favoured the public with an outline, in his second Memoir on Babylon. It is in his book, numbered 14, and from the largeness of its dimensions, I should suppose has been a royal, stationary, or table, signet, used for the ratification of edicts and other state purposes.

The difference in the style of design, between the wings of Mr. Rich's Adad and those of your gem, is worthy of observation, since it affords an opportunity of comparing the primitive simplicity of workmanship, or the refinement of thought, of a very early age, with a similar work produced in a later, and certainly better, age of imitative art. Here also re-appears the radiance emanating downward; and the ancient connexion between religion and royalty, may be traced in the Mithraic or the Sabæan priest, who holds the solar orb, as by a clue, over the head of the monarch. This engraving, (for an inspection of which I beg to refer to the "second Memoir" of Mr. Rich), goes toward proving the superior antiquity of the sunbeam style of wings, while it corroborates the idea which I have already laid before the reader, concerning the archimagus and descending Ben-adad of Nakshi Rustum.

The following account of the solar deity of the Sabæans, from the pen of Macrobius,† unless I am much mistaken, has more direct and

* Concerning this oriental homage, bordering on adoration, our learned and obliging friend, Sir William Ouseley, in a note to the first vol. of his Travels, p. 109, refers to a work of Brisson, (with which I am unacquainted), "*De Regio Persarum Principatu*," lib. i. and to Strabo's Description of Media, lib. xi. wherein the learned geographer affirms, that this species of royal worship came originally from the *Medes* to the Persians. In the primitive ages, the Medes and Persians were Sabæans, as well as the Canaanites.

† As I find him translated by Dr. Prichard in his learned work on Egyptian Mythology.

more certain, reference to the radiant orb which is sculptured on your highly interesting cylinder, than it is often the lot of the antiquary to discover between the art and literature of distant periods of time. "They give the name of Adad, which signifies THE ONE, to the God on whom they bestow the *highest* adoration. They worship him as the *most* powerful Divinity; yet they join with him a Goddess; and to these two deities, which are in fact the Sun and Moon, they ascribe supreme dominion over all Nature. The attributes of this Divinity, are *not described in words*, but in *symbols*, which are used to denote that power which distributes itself through all the species of existing being. The symbols are emblematic of the Sun; for the image of Adad is distinguished by *rays inclining downward*, which indicate that the influence of the heaven descends by solar rays upon the earth."—

Nothing—my dear Sir—could be more exactly descriptive of our engraved representation, than this passage of Macrobius. Beyond all doubt the cylinder presents us with one of the very symbolical Sun-images, which he describes, and which it appears from the books of Kings and Chronicles were once very common in Canaan; and since such sculptured truths are more unequivocal than any words, I might here safely rest the merits and the issue of this part of the present inquiry; yet words must be prosecutively employed in connecting words with the hieroglyphical mode of expression, and other and higher authorities, as far as words are concerned, will transpire in the sequel, in support of the testimony of Macrobius. I grant you that Macrobius is but a kind of literary androsphinge—half scholar, half old woman—but his better half is here before us; and, as he lived in the fourth century of our era, and had travelled over the same Syrian ground with yourself, it is not unlikely that he had seen such representations of the solar deity, as he describes and as your opal exhibits: wherefore considerable weight and value ought in this place to be allowed to his evidence.

Another testimony of some importance, and we will descend, if you please, to what is *under* the Sun. You are perhaps reminded here of a favourite phrase of king Solomon's. To every reader of the book of

Ecclesiastes, it must be obvious that Solomon wrote that book at a late period of life, and during the season of his returning piety. Why does the phrase *under the Sun*—"I beheld and lo! under the Sun"*—recur in it so frequently? There must have been some reasons for this; and, are any other so likely as, because, of those to whom it was addressed, or who might read the book, many were Sun worshippers? and because the author wished also to let it be known, that he himself was no longer addicted to this superstition, but regarded the Sun as a portion of created nature; as an all-pervading agent only of Almighty providence?

But when I promised another important testimony, I did not mean that of Solomon. I observe that D'Olivet, in his learned version of the ten first chapters of Genesis, makes use of words which I should think must strike every one as being strongly expressive of our hieroglyphical sun: at least, I have no higher conception of an abstract and pertinent mode of translating a language of analogical or symbolical representations of *things*, into a language of *words*, than I perceive in the phrase employed by this learned Hebraist of "*the lofty orb of luminous effluence*."

It is obvious that Moses, in writing the Pentateuch—if he did write it—would if possible, like Solomon, avoid calling the Sun by either of his Sabæan appellations. He would neither call this glorious light, Baâl, or the Lord; nor Adad, or the One supreme; but would seek for expressions which should be simple, grand, comprehensive, and just; and which, while they admitted the physical power and influence of the Sun as an agent, should operate (as in the instance of Solomon) as a tacit and wise denial of its moral supremacy as a deity. The words of D'Olivet in this place, are "*L'orbe de l'effluence lumineuse*;"† but in a long previous note, and in his vocabulary of Hebrew radicals, he has shewn that loftiness is implied in the text which is here the ostensible subject of his comments: and to have cited the whole of this note and his explanation of the radical אר *Ar*, would have drawn off too much of our atten-

* This is slippery ground: nor am I quite insensible to the danger of approaching so near to an often cited aphorism of the royal preacher. Yet I shall proceed with my *old new* matters.

† Cosmogonie de Moyse versions litterales, p. 227.

tion toward matters—very interesting, I allow, but foreign, or at least, not necessary, to our immediate purpose.

The words are used by M. D'Olivet in mystic reference to Mount Ararat; but from this mystery—as from several others of the same verbal character—I purposely avert, or would at present withhold, attention. We have mysteries enough of our own; or that are inseparable from our subject; and you know, my dear Sir, that if we follow these digressive attractions but for a moment, what a swarm of pleasing and persuasive possibilities come fluttering round our fancies—as they did with their Syren seductions in the spring season of life. These you would resolutely brush away and discard,—(Sir William), and so must I—however otherwise at times inclined, since their butterfly beauties so seldom lead to certainty, or to any lasting or useful results. “To-day they sparkle, and to-morrow die.”

If we now apply the above epithets of this learned Hebraist, to the sculptured Sun of our cylinder:—here are wings,—the physical or material means of exaltation, (to say nothing at present of volition), here is the orbicular form itself of the Sun—which is introduced in the upper part of the engraving; and here is also a downward-proceeding radiance, which I take for granted will be allowed to be as unequivocally luminous effluence, as sculpture could possibly express. A coincidence so close and striking, between the record of Macrobius, the philology of D'Olivet, and the facts of ancient sculpture—even though we had known no more of the matter—would seem to render it doubtful whether the verbal, or the hieroglyphic, representation of this glorious orb, were the original, and may well have inclined Bruce and Sir William Drummond to think that at least some of the earlier parts of the Pentateuch, were copied from previously existing hieroglyphics: yet my own impression would have been simply that the authors of these parts of the scriptures *had seen* such sculptured representations of the Sun.

However this may have happened, I conceive it to be self-evidently true, that simply to imitate a circular form and add to it a pair of radiating wings, is an earlier effort of the human mind, than to “body forth” an analogical resemblance by *personification*, as in literature, narrative and

description, would be resorted to before the refinements of figurative or metaphorical modes of expression. We run no hazard, I think, in concluding that the sculpture of the winged orb, preceded that of the personified Sun.

The personification of the Sun appears to have been an invention of subsequent date—if not to the sculpture of the present opal, (which I hold to be doubtful)—yet to the idea, dictated either by infant science, or by reverence for the Sabæan ancestry of the Chephenes,* of grouping the stars into constellations, and perhaps did not originate in the same country. The orbicular representation of this great luminary, accompanied by the symbolical wings, is probably of Æthiopian or Cushite origin, and may have travelled, by the route laid down by Mr. Bruce, or that pointed out by Count Volney, from the primitive metropolis of the Sabæan or Homeritic Arabs to Egypt, by a more easterly route to Persepolis, and with Nimrod to Babylon. Herodotus writes that the Phœnicians themselves (or Canaanites) migrated in remote ages from the shores of the Erythræan sea. But the personified Sun—a regal figure, which in the subsequent pages of this work I shall repeatedly produce—appears to have been first formed, and formed in a later age, at Babylon.

Of time, of which the Sun's apparent motion is the measure, Milton writes that it is "ever on the wing." This sentiment may possibly be meant to be mystically expressed by these winged Sun-images, or be even intended to be understood by common observers; as when Homer sings of "the indefatigable Sun," he clearly alludes to the unremitting apparent motion of that glorious orb, and to its being at the same time unsusceptible of labour; a sentiment which is admirably expressed in the sacred poetry by "coming forth as a bride-groom."

In a poetical passage of the prophet Malachi, we read of "the *Sun* of righteousness *arising* with healing *on its wings*."† The figurative expressions, appear to be taken from the sculptured representations which the prophet had seen, of the winged orb: the genial effluence of the rising

* The first astronomical priests, who preceded the Chasdim, and were called Chephenes, from the Æthiopian king, Chepheus: the Cepheus of the modern sphere.

† Malachi, ch. iv. ver. 2.

Sun, is beautifully expressed by "healing on its wings," and as every thing that possesses the power of *rising* in the air *has* wings, the metaphor is as perfect as possible. But a tasteful and philosophical modern scholar, writing of the antique, uses the words "wings of pervasion," which—while they confirm the averment of Macrobius, that the attributes of the Sun ("not described in words but suggested by symbols,") are used to denote that power which distributes itself through all the species of existing being—come looming up toward us with a freshness of meaning, or fresh confirmation of the meaning of the Sabæan hieroglyph: a meaning too which is certainly not impertinent to the mystic system, over which in the present instance the wings are spread; nor to what I am about to mention.

Mr. Parkhurst, in translating part of the Orphic hymn to Protogonus or the *first begotten*—by which the learned lexicographer, with ridiculous adherence to a certain fanciful system of chemical metaphysics, thinks is meant "the mixture of light and spirit when first in action;" but which Vossius* or his Greek original, pronounces to be Priapus—has the following epithets, "*ether-revolving; egg-brooding; exulting with golden, (i. e. luminous,) WINGS.*"

May I not claim, or reclaim, these epithets for the Solar deity of the Sabæans? Unless the Orphic hymns are of Irish extraction, how could Priapus be, or be hailed as, the *First-begotten*? Meanwhile the Sun may well have been believed to be so, by those mystics who did not suppose that luminary to be self-existing.

I observe too, in Dr. Dodd's translation of these ancient and extraordinary productions, that Pan, Apollo, and the Sun, are there identified: Apollo being addressed as the "two-horned god," (which two horns the scholiasts have explained to mean the fountains of life and light), but perhaps the radiating wings (of which the scholiasts might not have been aware) misinterpreted by some Grecian enthusiast, might originate the phrase—"the two-horned god whose lucid eye, light-giving, all things views." And in another place Pan† (as identified with the Sun) is invoked in words which appear not irrelevant to our engraving. The invo-

* De Orig. et Prog. Idololatriæ, lib. 2.

† Letters on Mythology, p. 65.

cation is, "O happy source of ever-wheeling motion, revolving with the circling seasons; author of generation, divine enthusiasm, and soul-warming transport! thou livest among the stars, and leadest in the symphonies of the universe."

The reader may not be displeased to be further reminded here of the beautiful concordance which exists on the subject of our winged solar orb, between the Grecian, and the Hebrew, poetry. Homer's wisely chosen epithet, "ΑΚΑΜΑΞ," has been rendered "the *indefatigable* Sun," and I believe strictly means to perform without labour. The measure or rhythm of that celebrated paraphrase of the 19th Psalm, which is too commonly ascribed to Addison, but which should be restored to Andrew Marvel, admitting of fewer syllables, the author has, "the unwearied Sun:" the Psalm itself, with that more sublime reference to the Creator, which distinguished the religion of the royal poet, from the worship of the heathen, is rendered in the Book of Common Prayer, after the introductory verse, "The heavens declare the glory of God."—

"In them hath he set a tabernacle for the Sun,* which cometh forth as a bridegroom† from his chamber, and rejoiceth as a giant to run his course. It goeth forth from the uttermost part of the heaven, and turneth about unto the end of it again."

Whether this indefatigable bridegroom—this rejoicing giant—this volant and lofty orb of luminous effluence—is represented in our engraving

* Since writing the above, I observe that Sir William Ouseley thinks this verse should have been rendered,—In the Sun hath Jehovah placed his habitation, or tabernacle. As the question of the *agency*, or the *supremacy*, of the Sun, was the great point of controversy between the Sabæans, and those of the orthodox creed of David; and as this reading of Sir William's has pertinent and conciliating reference to both sides of the question—triumphant reference also, for that of the Psalmist—I conceive that the Bible-reading part of the public, will not be unthankful to our learned friend for this important emendation—or restoration rather; for Sir William says, that according to the Greek septuagint, the Latin vulgate, and the Æthiopic version, we should read "In the Sun he placed his tabernacle:" according to the Arabic, "He placed his dwelling in the Sun."—*Appendix to 2d vol. of Sir William Ouseley's Travels*, p. 268.

† The words tabernacle and bridegroom, as employed in this passage, have a certain local and proper reference to the customs of the Hebrews, which ought not to be overlooked, their espousals being anciently made under tabernacles or tents.

as at the time and in the act of *turning about*—that is to say, at the Tropic?—we will presently investigate. It is obviously stationed at the head of a very curious hierogrammatic representation—of—what? What is this singular figure branching off curvedly on either side from a central rod or axis? and how is it connected with the Sun and its other sculptured accompaniments?

It is apparently the graven image of a piece of ancient mechanism which must have turned collectively and centrally on a pivot hinge, and the branches severally in metal sockets, as we now move the branches of a chandelier. But what has been its purpose?—Let us examine whether or not it designate that mysterious system of fluxes of Stellar, or that of the Lunar, influence, to which the judicial astrology of the Chaldeans looked up for celestial light, and on whose supposed agency it depended for existence. My imagination, I confess, has been much busied about it, and I shall now endeavour from that wide wilderness of fact and conjecture over which it has rambled, to retrace my more profitable steps; to cull a few flavoured berries and odoriferous flowers, and spread them for the reader's repast, or bind them up for his amusement—happy if I might have said, for his lasting antiquarian profit: but though I will not anticipate that I have discovered the precise intention of the author of this interesting astrological diagram, or representation of an ancient astronomical machine—(or whatsoever it may prove)—I cannot forbear to hope that what I shall have the honour to suggest, will at the least, lead better informed minds to conceive it.

Is it intended to express generally the heavenly host: that is to say, those orderly degrees of spiritual intelligences, which the Sabæans supposed to be ensphered in the stars—marshalled and led on by *Baal-Saba*? (i. e. the Lord of Sabaoth?) This was among the first questions I asked myself concerning this extraordinary figure.

In the introductory discourse to his version of Job, Dr. Good announces, with his usual perspicacity, as one of the chief doctrines of the patriarchal faith, that the intentions of Providence were believed to be carried into effect, by an heavenly hierarchy, composed of various ranks

and orders, possessing different names, dignities, and offices: and the manner in which the Host of Sabaoth is generally spoken of, implies that similar principles of subordination—perhaps the very same, differently understood—were applied by the star-worshippers to the stars. Milton, with reference to the heavenly hierarchy, if not to the stellar origin of his fallen spirits, makes Satan address them—

“ Progeny of Light!

Thrones, dominations, principedoms, virtues, powers :”

Hence too the probable origin of those scriptural texts (of which there are several,) that express or imply, that “One star may differ from another star in glory.”

I observe that Parkhurst, in expressing the word *שֶׁל* (*Sei*), renders part of the 12th verse of Job, xxii.—“the head of the stellar fluxes, how high they are!” But Dr. Good embodies the ideas contained in the whole of this verse more distinctly, by rendering it, “Is not God in the heights of the heavens? and doth he not look down on the topmost stars?”—With that substitution of the solar orb, for Jehovah, which must have taken place among the Sabæans at the era when they unhappily apostatised from the pure and primitive faith which became that of the patriarchs, by substituting veneration for visible signs, instead of that which was due to invisible causation,—this mystic state of things, appeared to my earlier reflections, to be intended to be expressed on our gem. In fact, many of the terms made use of in the book of Job, and in other parts of the Bible, shew that the hosts of heaven—stellar, as well as angelic—were supposed to exist, like those of earth raised by imagination to a state of ideal perfection, under orderly degrees of beautiful subordination; and it seemed no very extravagant supposition, that the figure which this engraving presents, might be an attempt to explain or indicate the Sabæan system of stellar fluxes of astrological virtue, by a geometrical or hierogrammatical figure; as we now use an armillary sphere to explain the imaginary circles of the heavens, and an orrery or planetarium, to illustrate the motions of the planets.

But it may possibly be the engraved representation of such armillary,

or revolving, machines, as were actually used by the astronomical priests in very remote ages, for the purpose of explaining, or recording, the periodical motions of the sun, moon, and stars, (or it may be only of the sun and our annual complement of moons). Let us carefully inquire, for in case it should turn out to be the resuscitation of an antique astronomical instrument, it cannot fail to be regarded as a most interesting and precious fragment of antiquarian acquirement.

Its general resemblance to a tree, and more especially to a tree with collateral and pendant branches, like the palm-tribe, needs scarcely to be pointed out. The sacred and mystic tree of the Hebrew Cabbalists appears to have been taken at first from some Sabæan diagram of this description. Sir William Drummond says, that, "though *called* a tree, it was a type of the universal or Mundane system," and again, in the *Œdipus Judaicus*, pp. 198, 9, he writes more amply to the present purpose. "A fruit-tree was certainly a symbol of the starry heavens, and the fruits typified the constellations.* In the ancient astronomical monuments of the Persians,† fruit-trees are generally represented. We see traces of this in the mythology of the Greeks, and especially in the astronomical allegory concerning the golden apples brought by Hercules from the gardens of the Hesperides. In the thirty-six decans taken from the Egyptian astrologers, frequent allusions are made to fruit-trees and fruits."

"On the ancient coins and other monuments of the Tsabaists [Sabæans] and even of the Israelites, we see fruit-trees represented. The Sephiroth of the Cabbalists was disposed in the form of a tree; and of course under this form they intended to represent the universal system. The fruit-tree mentioned in the Apocalypse, has been supposed by some to

* This may also be inferred from Josephus's account of the sacred gifts of Ptolemy to the Jewish priesthood.—Vide *Philo's Embassy*.

† On a beautiful cylinder of Chalcedony in the British Museum, of which the subject is astronomical, and the style of design Persian, a palm-tree is represented. It has, as in the upper part of our engraved armillary instrument, six branches on either side, and beneath these hangs on either side the sheathed fruit, forming, as in the female palm or date tree, a ball at the extremity of its stalk.

be a type of the zodiac, as it bore twelve fruits, and one each month. In the Apocryphal Gospel of Eve, spoken of by St. Epiphanius, it is said that the *Tree of Life* bore one apple each month. The Arabians typify the zodiac by a fruit-tree; and on the *twelve** branches of this tree, the stars are depicted as clusters of fruit. The Cabbalists represent the tree of life as marked with the emblems of the zodiac, and as bearing twelve fruits. When we consider these things, together with the reverence of the Tsabaists for groves and trees, we shall hardly doubt that trees, and especially fruit-trees, were symbols of the starry heavens."

Thus far Sir William Drummond; nor do I perceive that Dr. Kennicot is much, if at all, at variance on these points, with this ardent and philosophical inquirer. The learned Doctor remarks, that St. John the Divine did, in his vision of the River and Trees of Life, but *copy* the prophet Ezekiel, to whom the form of the second temple was revealed in a vision at Babylon.† And certainly the visions—even many of the particular expressions—are so very similar, that the mystical meaning may well be thought to be the same. This is especially the case with regard to the trees of life; for while the prophet says, "*It shall bring forth new fruits according to its months*,"‡ the Apostle nearly repeats him in terms as follows:—"There were trees of life which bare twelve manner of fruits, *yielding* their fruit every month."§

Of what have been generally, but erroneously, regarded as the *groves* of the Sabæans, I shall treat more largely anon. My endeavour in this place will be to lead my readers, like a jury of inquest, to investigate certain past occurrences, which we can only see in their results. A grove (we know) is a collection of trees of no settled or determinate number. I think we shall discover that what have been termed the mystic groves and trees of the ancient Sabæans, were not unconnected; notwithstanding that, literally speaking, they were neither groves nor trees.

* This number seems to indicate that a symbolical palm-tree, similar to that of the Persian chalcedony, which is mentioned in the preceding note, is to be understood. But it bears yet closer similitude to the graven-image of our cylinder.

† See the first of Kennicot's Dissertations, pp. 95-7.

‡ Ver. 12, ch. xlvii.

§ Revelations, ch. xxii. ver. 2.

I request attention to the circumstance, that in all the accounts of mystic trees which I have recapitulated from Sir William Drummond, Dr. Kennicot, the Arabian authorities, and St. Epiphanius—hieroglyphical, or artificial trees, appear to be alluded to, and not real, vegetating, trees. Is it not a notable circumstance, to find between the Hebrew Cabalists, the Arabians, the anonymous gospel of Eve, the prophet Ezekiel, and St. John the Divine, so close an agreement respecting occurrences and allusions so distant in time? How can it have happened? Does it not appear that all have drawn through their several local channels, from a single and remote source? That some great and memorable archetype there must have been; and that this archetype was not a tree of natural growth, but some symbolical, artificial, and mysterious thing, which by reason probably of its having a stem and branches, has been analogically termed a tree?

An armillary and astronomical machine, or instrument, erected long, very long, ago—quite in the primitive ages—for the purpose of computing or explaining, or enregistering, the motions of the celestial luminaries; supplies, in all the places where those religious trees are so mysteriously mentioned, the middle term which enables us to reason onward,—furnishes the leading idea which empowers us to retrospect, and to conceive the rest, in cases where we should else be completely at a stand, or remain at the mercy of the most moon-raking visionaries. Assuming, what I distrust not the being able to show, that such instruments have really existed—viewed in the light in which this supposition, and the authorities above cited, would place them,—the sacred groves and mysterious trees of which we read so often in the early scriptures, as well as those of the Hesperides, of golden memory, and all else that are mentioned on that far off verge of history which clouds darken, and where fable eclipses fact, and which have called forth so much of learned disputation and various conjecture, become far more intelligible and explicable things. To the Sabæan aspirants or novices, they were doubtless trees of *initiation*. Almost without a metaphor they might be termed trees of *knowledge*, if not of life; for knowledge was their ostensible, and their only, fruit. Of life, however, Astrology always impiously aspired to foretel the duration, and

predict the leading events.—Ah! my dear Sir, those seducing trees of Eden are within sight. Let us avert our vision. Let us listen to no bland insinuations. Let us keep the serpent aloof. Let us say, and feel, and conclude at once, that their fruit is *forbidden*.

THIS Essay has already run out to such length, and is likely to run so much further, that perhaps I ought here to begin chapter the second. In writing the latter part of the first, I trust you perceive, Sir William, that my endeavour has been to reluminate what time has darkened; and to reason, with some of the fathers of the church on my side, in opposition to others. It is not my fault that they do not all agree. Should any of my readers have thought me unorthodox, here or elsewhere; or that antiquarian urgency has carried me back too far toward the unfathomable abyss of the past eternity; and that on such matters, silence had been better—other constructions of these mysterious Scriptures, being wisely established—let him please to think nothing of my *other-wiseness*; but, creating a little sphere of silence to suit himself—let him pass on to the remainder of my explication. Let him tell me, if he can, in travelling over untrodden ground, where to stop in an exploratory excursion, and what fresh courses to pursue. Let him imagine, if he be able, what I have suppressed; with Milton's Adam, let him allow that error, or even

“ Evil, into the mind of God, or man,
May come, and go, so unapprov'd, and leave
No spot or blame behind:”

at least let him grant that I endeavour not to allow that early attachment to a particular system, by which so many antiquarian researches have been so materially injured, to bias or obstruct free examination.

I have in effect before stated—and I hope the critics will not quarrel with me for repeating here—that one of the unseen master-springs which gave motion to the mind of the author of the Pentateuch, was a strong internal feeling that the great heretical mistake and *original sin* of the progenitors of Israel, had been the rendering that homage to concomitant *signs*, which could be due only to the FIRST GREAT CAUSE. The same

principle of the patriarchal faith is discernible in the wonderful poem of Job; and it "hits the sense" of human apprehension in its finest aspirations, in the divine morning hymn of Milton, where the stars, but more especially the Sun, although declared to be "of this great world both eye and soul," is called upon to "acknowledge HIM as greater."

Sabæan meanings, and references to the faith, customs, and prejudices, of those who professed this ancient superstition, peep out here and there in the Pentateuch, and indeed in the writings of the Prophets, and other early Scriptures, notwithstanding that constant dread of the relapse of the Israelites toward the heresy of their ancestors, which induced the sacred penmen to disguise or suppress them, wherever they found it prudent and practicable. The redemption—the reclamation rather, of the Abrahamic race, might compel *them* to this conduct: but *we* are under no such apprehensions for the true religion. There is no danger now of our mistaking the stars for moral causes, or deities, or even for signs of approaching human events. There is nothing therefore to deter *us* from investigating this part of the mental history of man, by the prosecution of such studies as the present.

Returning then to our graven image of an astronomical instrument—so to pronounce by anticipation, what I am only in the progress of proving—There are several passages in the English Scriptures, which have much perplexed those readers of discernment who wished to attain correct ideas on the subject, from their having been supposed to relate to groves of sacred trees, and at the same time treating of those groves as if they had been susceptible of being stamped to pieces and pulverised, and also of being contained within temples, and even under single trees; circumstances which are utterly irrelevant to groves of natural trees; but which such nominal, figurative, or artificial trees, as I have here the honour to discourse of and exhibit, would easily explain. Neither is the word אֶשְׁרֵה (*Ashre*) which *almost* every where throughout the Old Testament has been rendered Grove, the only phrase of frequent recurrence in those early scriptures which treat of the superstitions of Canaan, that may be proved, from the context and from attendant circumstances, to be erroneously translated in our common Bibles.

As those who would maintain the infallibility and the integrity of the Bible, cannot mean the infallibility of our English translation, I shall have the less scruple in shewing, from the internal evidence of the sacred records themselves, that wherever in those passages which relate to the apostacies of the Hebrews and the idolatries of the neighbouring nations, the expressions, "Groves," and "High-places," occur,—as they frequently do in the books of Kings and Chronicles, and in the writings of the Prophets—neither high-places nor groves can be meant. I here speak of them together, because we generally meet with them in conjunction. In the same texts which mention the groves, we commonly find the high-places mentioned also; and the groves and high-places, from this habitual connexion, have sounded like wedded corroborations of each other. But it is to the Hebrew word, which has been rendered *grove*, that I would at present solicit, and must endeavour to limit, your more especial attention.

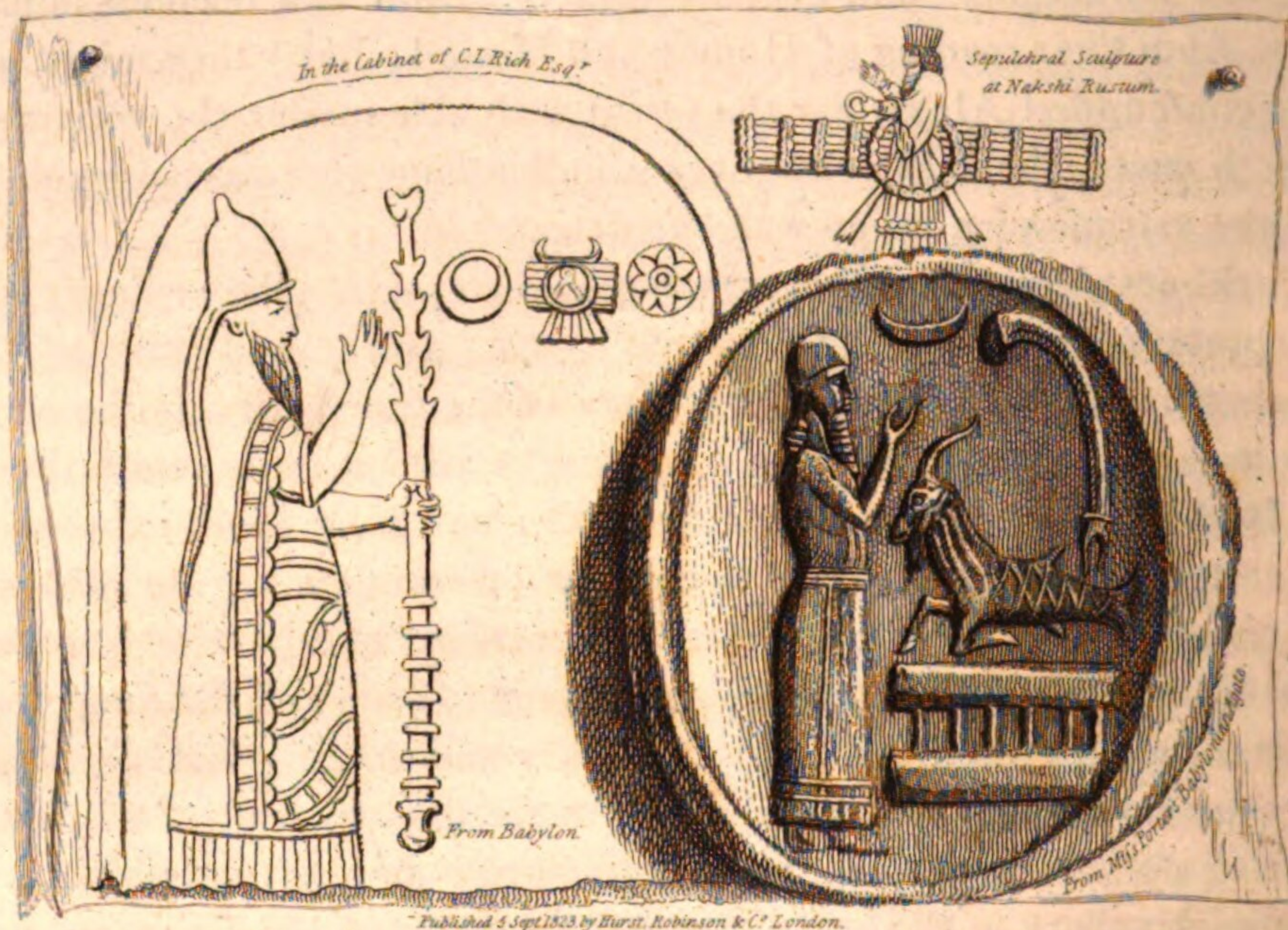
May I be permitted to state here, that it appears to me, that our Bible translators—being college men—men well tutored no doubt in the learned languages, and in the classic lore of the heathen pantheon—I write it with due respect for such literary attainments, and with due gratitude for what they have accomplished; but—scholars of this description, finding that groves of sacred trees were occasionally mentioned by Æschylus, by Sophocles, by Lucan, and other classic poets, as having stood in the vicinities of the sacred edifices of Greece; and being more solicitous, of course, to render manifest the heterodoxy, than the science, of the Sabæans—wishing to render their rites odious rather than clear; they gave themselves no trouble to discriminate between the idolatries of Greece and those of Canaan, but adopted the idea of "groves," without due critical examination, and employed that word whenever they came to the Hebrew term *Ashre*,*—just as in rendering some other technicalities which occur

* All the translators but St. Jerome, whose anchoritish spirit tormentingly provocative of contrast, appears to have come upon him when he arrived at the word, and taught him to fancy, rather than to feel, that the Ashres would become more repulsive and abominable, if he represented them as being something more indecorous and even lewd, than had been spoken of before, or perhaps thought of by preceding translators; never reflecting that human sympathy had always eyes and imaginations for physical energy, but seldom ears for moral precept. Indeed to an ancient proverb, the Ashres of St. Jerome were *without ears*.

in those passages of the Bible which relate to the ancient astronomy, they pressed *Orion* into the service—some when they arrived at the Hebrew word *Kimah*, and others when they arrived at *Kesil*: and this fallible course was pursued by the translators, notwithstanding that the name of Orion must have been utterly unknown in the age and country of Job, and even of the prophet Amos. How came the Bible translators to allow themselves to be led into this error? Evidently for no better, and for no other, reasons, than because *a constellation* was clearly meant in the texts which they thus translated, because they thought one constellation was as good as another, and because that of Orion had become familiar to them, from their reading of Homer and Hesiod; but “they might as well have confounded Alexander the Great with Alexander the coppersmith.” In both cases, the local antiquarian indications were passed unobserved, and the astronomical mine was left untouched.

Parkhurst, though previously disposed to receive the ordinary biblical interpretation of the Hebrew words אֲשֵׁרָה (*Ashre*), and אֲשִׁירָה (*Ashire*), appears finally to abandon the *groves* of the translators, for he confesses that in far the greater number of passages where these words occur in the Bible, they stand for an idol or idols: and if by those expressions be understood objects of pious reverence or worship, in the abstract, or *whatever* be their forms, he is so far correct; but he afterward writes, somewhat vaguely, of their being feminine;—notwithstanding that St. Jerome was for their being so decidedly masculine. Let us recollect, however, how common it is amongst ourselves to speak of ships of war (bearing perhaps the proper names of valorous heroes to distinguish them from each other) in the same manner, as being of the feminine gender; and let us bear in mind that in the same kind of idiomatic sense, these machines may also have been verbally regarded as trees, without at all confusing the ideas of the Sabæans. I mean, the sense in which we now say *axle-trees*, and in which we so often employ figuratively the term *branches* also. In fact, the central and sustaining rod of each machine, was an *axle-tree*: nor could a more appropriate word than *branches* be colloquially used to convey an idea of the collateral curves of this curious piece of mechanism.

I conceive that in the outline of a sculptured Babylonian fragment, which has been sent home by the British resident at Baghdad, a Persian, or a Babylonian, priest—one perhaps of the Ash-aphim,*—is represented in his sacerdotal dress (as I should judge), and as in the act of consecrating the axis, or stamen, of one of these Ashres (or artificial trees) to the Moon, to the winged and radiant equinoctial Sun, and to Aldebarân, which may be observed to be sculptured on this interesting fragment, ranged in an horizontal line, to denote their simultaneous rising on the morning of the vernal equinox.



A peculiarity may be observed in the mode of exhibiting the Moon; and the monument may possibly have reference to a particular year when she rose eclipsed. She is not, as on other Sabæan monuments, a simple crescent, but as if the astronomical priest who directed the operations of the artist, had intended to shew a more perfect conjunction of the two greater luminaries: however, this may perhaps be only a local and cus-

* A sacerdotal order, of which we read in the Book of Daniel, (ch. vii.), and in other parts of the sacred Scripture; and of which I shall treat further, anon.

tomary hieroglyphical mean of shewing that a perfect *conjunction* is always to be understood as the commencement of the Babylonian year; or, more probably of the cycle termed *Saros*, of which I have before discoursed.

Of the disproportionate dimensions of the Sun, I can only say that such disproportions are not uncommon in ancient astronomical monuments; and that the space on the stone not admitting of its being represented larger, the Sun was necessarily "shorn of his beams." We have before seen that with astronomical symbols, relative dimensions had little to do: and I have introduced that more elaborate developement of the same hieroglyphic which appears among the sepulchral sculptures of Nakshi Rustum, into the same vignette, in order to afford a comparative view, both with the present symbol, and with the winged and radiant orb of that cylinder which I am here endeavouring to explain and illustrate. To shew that the *equinoctial* Sun is meant, an antique scale-beam in equilibrio, is sculptured above his orb, which pertinently symbolizes the equality of light and darkness, at the *nouroze* or first day of the year.

Concerning the Aldebarân of this interesting sculpture—I have already had occasion to say so much of this *leading star*, that the present reiteration (for so it must be in great measure) shall be brief. This is the star which at the ancient vernal season—I mean in those very remote ages of which I have formerly discoursed, and when the present monument was sculptured, rose with the Sun, and led on the host of Sabaoth. I do not suppose that the Sabæanism of Babylon, Persia, and the Arabian Æthiopia, materially differed at that early period when Aldebarân was venerated as a *deity* or *disposer*: (the reader will recollect here, that according to Herodotus, these were at first synonymous terms :) or that they differed at all with regard to this splendid star; and it is very remarkable that Herbelot, in enumerating the more ancient deities of the latter country, professedly from Arabian books, mentions "Aldebarân or the Bull's eye" (which leaves no doubt of the star) among the number.

We are much beholden then to Mr. Rich for rescuing from oblivion a monument combining and corroborating these curious antique facts. And now, after offering a word or two concerning another Babylonian sculpture, which also will be found to reflect light on our proper subject,

and with which I have been favoured by Miss Porter, the sister of Sir Robert, the distinguished oriental traveller and artist—I propose to return, with these auxiliary aids, to the further developement of the Boughton cylinder.

The subject of this ancient and worn engraving—which I exhibit in its proper form of an impression from a signet—is not, as a shallow or hasty observer might have supposed—a victim upon an altar, and a priest sacrificing. Raspe has generally contented himself with this sort of vague explanation (if such it might be termed) of engraved gems presenting us with similar devices: but it is unfounded, and a vulgar error. The present agate represents neither a victim, an altar, nor (as I am led to believe) a priest: but certainly neither a victim nor an altar.

I might have found some difficulty in maintaining these opinions, had the middle figure been a goat: but it will be observed to have only the head and fore-legs of that quadruped, and to terminate backward, in the tail of a fish. It is the Capricorn of the Babylonian zodiac; and the mechanical figure beneath, is an early and rude attempt to shew, by means of measured degrees, the portion of that zodiac which was occupied by the stars of Capricorn.

If I mistake not, the most ancient division of the armillary zones of the sphere—but more especially of the ecliptic—was into sixty parts, which would leave five for each of the signs. I am inclined to think that they had but eleven zodiacal constellations, and that one of these occupied a double space: however, I shall not insist on this, as Sir William Drummond quotes the authority of Bailly in proof that “the (zodiacal) circle was originally divided into sixty degrees; and consequently each sign of the zodiac must have been divided into five parts.”*—In either event, five must have belonged to Capricorn, as is displayed in this Babylonian engraving: and it may be worthy of curious remark, that the figuring of this sign has undergone no other change in its transmission from the primitive astronomical ages to the present, than the addition of a sort of heraldic flourish in his marine tail.

The curved figure bending over Capricorn from the right-hand side, and having the general form of a branch of the palm or date tree, I con-

* Drummond on the Antiquity of the Zodiacs of Esneh and Dendera, p. 42.

ceive to be an *ashre* branch detached from its central rod, or stamen, and shewing, at its lower extremity, its mechanical means of being fastened thereto.

I think this engraving, speaking of it in the aggregate, is an horoscopical signet, originally belonging to a Babylonian citizen of the middle class—one who was not sufficiently opulent to emblazon a cylinder with the astral details of his nativity, but who was at the same time opulent enough to display something more than simply the sign under which he was born; and accordingly we find that, his birth was nocturnal, the Moon being above the horizon, and posited in the ascendant sign, Capricorn, with the planet Saturn—for so I would interpret the aged figure on the left hand; but to produce here such engraved arguments as might substantiate that fact, would too much enhance the expense of a volume, toward the defraying of which I have no subscription; and would perhaps draw off too much of our attention from the opal cylinder.

That fact is not material to our present purpose. My chief reason for introducing the signet in this place is, because it seems to confirm the opinion I had formed from reflecting on the speculations of Dr. Kennicot, Sir William Drummond, and the Rabbin—that each of the branches of one species of the antique astronomical instruments,* was believed to represent a zodiacal sign, and that in the Babylonian chambers of imagery, each branch bent over, or toward, the sign to which it appertained, as the present branch bends over Capricorn. I have shewn this device about four times the size of the original, which is engraved on an agate.

From comparing the impression from Miss Porter's agate, with the outline of the Babylonian monument transmitted by Mr. Rich, and with your cylinder (Sir William) it would appear that the branches of the instrument were separable at pleasure from the central rod or axis,—the upper side-notches of which indicate that there were socket receptacles for the admission of as many of the said branches as any given occasion for calculating or divining might require; while the hinges beneath shew

* One of these figures, however, is engraved on a carnelian, of which a representation and explanation will be introduced further on in the present volume.

that the planets might there be taught to circumsolve, as the truths of astronomical observation might demand.

The general reader will here recollect what is contained in my last essay respecting the *branches* of Æthiopia and Ezekiel, and, combining it with the illustration derived from the present antiques, will easily apprehend that "putting the branch to their nose," which the prophet mentions with so much of holy horror, was, in all probability, kissing, and thus acknowledging the celestial influence of, *that* branch, or zodiacal sign, under which each worshipper was born.

Perhaps the central or sustaining rod, as held by the Pontiff or *Ashaph*, on Mr. Rich's monument, might, without its collateral branches and balls, be ordinarily termed by the Hebrew word for a tree; and the whole instrument, as represented on your gem, an *Ashre*.* I am not Hebraist enough to dispute that אֶשְׂרֵה might not *also* mean a grove—as the word *ashes* in our own language (as well as many words in all languages) has a double meaning: In this case the English Bible-translators have only got hold of a pun by the wrong handle. But we shall presently arrive at the hyperbole, or the inconsistency, that Ashres were erected "under every green tree;" where the word in the Hebrew, which is equivalent to our word green, must have been intended to convey some contradistinctive meaning.

If I rightly construe this outline, it further accords with your antique engraving, in suggesting, by comparison with the scale of the accompanying figures, that these astronomical Ashres were about the height of a man; dimensions which we may easily imagine to have been very convenient, for fixing, unfixing, and moving round, as occasion might require, those little balls which branch off curvedly from the sustaining rod or axis.

Of this antique, Mr. Rich writes, that it is "a stone two feet in length, nineteen" (inches, I should suppose) "in breadth, and nine inches in thickness; it is broken at the bottom. On the front is the sculpture, and on the right side the inscription," (in the arrow-head character). At the

* The reader will allow me the present use of these Hebrew terms *Ashaph* and *Ashre*, until we can return to the discussion more amply furnished with proofs and authorities.

close of his memoir,* he adds, that "the true Babylonian antiques are generally finished with the utmost care and delicacy."†

To you, Sir William, I need scarcely remark, that the relations which words bear to each other; the growth and mutations of their meanings; and the corresponding expansion and changes of human ideas—where they are distinctly traceable—are exceedingly curious. I know that on this subject you feel the interest of an antiquary and a scholar, however ridiculous or reprehensible may be the abuse of such matters. From the same Hebrew, or Oriental, word אֲשֶׁר (*Asher*) appears to have sprung the two meanings, *Advancement*, and *Blessedness*. Julius Bate and Parkhurst adduce numerous scriptural instances, where *Asher* means to *proceed*, or *go forward*, and others where it as evidently means to *prosper*. Bate adds, that "the word literally signifying to proceed, or go forward, shews whence they (the Hebrews) took the idea of *blessing*, or happiness."‡ Upon the nationality and the long endurance of those ideas among the Jews, it is not necessary to dwell. What Jew has any feeling or notion of happiness but that of fortunate advancement?

From what the Hebrew אֵשׁ (*Ash*), אֲשֶׁר (*Asher*), and אֲשֶׁרֶה (*Ashre*) were originally derived, I thought when I read the substance of this Essay at the Royal Institution, that no modern scholar had mentioned: I further thought that *Ashre* had perhaps been at the first conferred on the divining implements of the star-worshippers—like our word *Orrery*, under similar circumstances—without reference to things antecedently known and denominated, and I did not know that אֵשׁ (*Ash*) was the etymon or radix of the word. As you did me the honour to be present, Sir, you may perhaps remember my expressing myself to this purport; but some questions were asked after the lecture, which stimulated my

* The second on Babylon, by C. J. Rich, Esq.

† If the sculpture be thus carefully performed, I cannot but wish that the public had been presented with something more than an outline, and that the bookseller's purse had been less consulted on an occasion so interesting as that of the publication of Mr. Rich's writings on Babylon. While the hieroglyphics and views contained in these elegantly written little volumes, are treated with comparative neglect, the arrow-head inscriptions are elaborately copied. But where is the use of accumulating such inscriptions, until some scholar shall be found capable of decyphering them?

‡ *Critica Hebræa*, p. 54.

further thought and inquiries on the subject, and I had not long retired home to my study, when the lovely form of Fontenelle's* Marchioness (whom I had fancied I saw in the lecture-room) appeared to enter it, and in reverie, the following dialogue took place, or seemed to take place, between us.

THE MARCHIONESS. You explained to us the name and nature of the Sabæan divining implements, or star-blessers, as you called them: but I should like to know whether they will bear catechising? and who gave them that name? or how they came by it? Could you not let us see the connecting link, between the thing denominated, and the pre-existing state of other things that were already named at the time of the invention of those instruments?

THE AUTHOR. Why, Madam,—your Ladyship heard what I said about the Orreries; and Nature, you know, has her mysteries, and is always more or less occult. She lets you see causes, and she lets you see the consequences or effects of those causes. You generally perceive that, in time, or place, or both, they exist near to each other, and you learn instinctively to connect them: but *her* mode of connexion—*that*, whatever it be—which binds the cause to the effect, she does not let you see. To those whom she kindly admits to her theatre, she does not expose her mystic wires.

THE MARCHIONESS. This may be all sufficiently satisfactory to you philosophers; but I own I should like to be informed how you came to know, or believe, or suppose, that one of these instruments—for I see clearly enough that it must be a representation of a mechanical instrument to answer some purpose or other—How you came to suppose that, because the Hebrew records have made you acquainted with the circumstance, that the Sabæans of Canaan had *Ashres*, or Blessers, within their sacred inclosures—and apparently an important article of the customary furniture of those places—I should like to know, I say, how you came to argue or infer, that they were such as is engraven on Sir William Boughton's cylinder? This seems to me, not one of Nature's secrets, but one of your own.

* See the conversations of this lively and profound French philosopher, "on the plurality of worlds."

THE AUTHOR. That is my *discovery*, Madam—as I trust you will finally grant; for I have not yet proceeded through more than half of my proofs. Neither need I repeat to your Ladyship what happened to Columbus, in the coffee-house at Madrid. I can produce you no Sabæan hierophant, or *Ashaph*, who, having traditionally become acquainted with such instruments as are in question between us, together with their uses and proper ancient designation, and who having traced these matters up to the fountain head,—or, to use your own catechetical figure, up to the first sponsors of the Ashres—will vouch for my accuracy. It is thousands of years since the Babylonian Ashaphim quitted the stage; and the records which they left behind (in the arrow-head character) can no longer be read:—the learned have long busied themselves in vain in their decyphering; but I assure you that I have no secrets, and you shall willingly see all my wires. The Hebrew language has done a little more for us in the way of supplying that connecting ligament which your Ladyship is pleased to seem desirous of inspecting, than perhaps you have yet been apprized of, or than I was aware of till I returned among my Hebrew radicals. The more profound Hebraists inform us that, meaning is incorporated with every character of that extraordinary language, that its elementary forms and sounds are significative of things, even when taken severally; and it will presently be seen that these primitive or elementary meanings, bear me out with regard to the word Ashre, when we come to analyse it. Wherefore, and since Hebrew Ashres were erected for at least five centuries anterior to the promulgation of the Decalogue,* it is very likely that this is not an exotic word transplanted into the Hebrew, from the vocabulary of Babylon or Arabia, but is a word common to the three languages, (or three dialects of the same language), and that its primitive meaning is therefore still traceable—affording, as I am led to conceive, mutual support to my argument, and to the system of literal explication of the learned D'Olivet.

According to this penetrating philologist, א (*Aleph*)† means a principle or centre, and ש (*Shin*), which when coupled with Aleph, forms

* This fact will be proved from the authority of the sacred Scriptures, in a subsequent page.

† Dr. Buchan favours me with the English sense of those passages from the rare and valuable French volume of D'Olivet, which unfold the primitive meaning of the Hebrew etymon in question.

אש (*Ash*), meaning a portion of a circle with a radius—no noun could be more essentially expressive of the meaning, or thing, which it is intended to convey, or represent, when mathematically traced back to the primary elements of nomenclature; and by reflection, no diagrammatic figure, more illustrative than that of our Ashre, of this primitive meaning. So that *Ash* signifies *a power emanating from a centre*; and in this emphatical and original sense, אש enters into the composition of the very first word of the Hebrew bible בראשית (*Ber-ash-it*) which has been translated "*In the beginning*," but where, *In his principiating, or originating, energy*, would be the more abstract, sublime, and correct, rendering. *Blessing* might also be understood to be expressed or implied; in which case the recondite meaning of this member of the first sentence of the Hebrew cosmogony, would run, "*In the principle of his blessing energy, God created*," &c.; but it is yet more likely that this latter is the derived, and *central energy of causation*, the primitive, meaning—applicable not only to the commencement of Genesis, but to the Sabæan Ashres also. And now I may venture to express my hope that your Ladyship is at least as well pleased as those who get behind the scenes at the Opera.

The Marchioness did me the honour to reply, with her usual graciousness, as she took leave—"Much better"—and to repeat nearly what she had said to Fontenelle, that "the more simple, plain, and easy, things were rendered, to her they appeared the more admirable."*

The term *Ashres*, then, my dear Sir William, (for the Lady is gone), meaning, in the language of Canaan, and that of the Hebrews, *Blessers*, or oracles of fortunate advancement, was at first conferred as a proper denomination on the Sabæan divining instruments, and conferred on the very principles upon which the Hebrew language itself is constructed; and therefore, as it now appears, with far more of technic propriety than our word *Orrery* on astronomical instruments of a somewhat similar construction.

Nor do such instruments, or the use of this primitive term, appear to have been confined to the part of the world of which we are treating. We read of mystic *Ashes* among the Phrygians and among the Greeks. I believe there was one within the precincts of the palace of the Trojan

* "Plurality of Worlds," first evening.

Priam. And what were the vocal trees and groves of Dodona, the most ancient of the *Oracles* of Greece? It is surely more easy to believe that the trees were artificial, than that their responses were audible. The mast of the Argo, fabled to have been cut in this real or fictitious forest, is fabled to have been oracular.

But, what is perhaps more extraordinary, more true, and more to our immediate purpose, the Edda of the Swedes treats of these mystic trees under the term *Ashters*. How they got so far northward, and how this term of designation came to be so modified, as to point, with the Hebrew language, directly to the stars, heaven best knows. It seems mysteriously to shadow forth an ancient connexion of some sort, between Asia and the north of Europe. But even so lately as "the eighth century of Christianity, it was enacted by Luitprand, king of the Lombards, that whoever paid any adoration, or performed any incantation to a tree (probably one of these mystic *Ashters* is meant) should be punished by fine." *

Those who have fancied the Trojan *Ash* to be no other than one of the elegant trees now called by that name, would perhaps not have done amiss to have satisfied themselves whether that species of tree is of Phrygian growth? If they are—whether it is likely that Homer would have mentioned a circumstance so common, as the growth or existence of a common ash?—Whether such trees did not at first obtain their distinctive name, from being the kind of wood of which the mystic *Ashters*, or *Ashres*, were usually constructed—from its having been preferred—for the same reason that it is still preferred by wheelwrights—namely, because it is hard and durable?

It seems not unlikely too, that the Latin word for a star, and that which now expresses the science of the stars, have grown from this oriental root, and with them has grown—an earlier shoot in point of time—*Aster-oth* or *Ash-ter-oth*, as a cognomen or title of the Moon: literally the star both of *Signs* and of *Blessing*, and understood, apparently, as *the star of blessed signs*. These meanings, with many other of a relative nature, and these references to their origin, appear to me not yet to have obtained due atten-

* R. P. Knight's "Inquiry," &c. p. 55, on the authority of Paul Deacon. de Leg. Longobard.

tion from the scholars, and contribute to make me wish that I had been one myself.

You perceive, Sir, that the ancient idea of *Blessing*, or of being blessed, which appears to have prevailed throughout the east, and to have reached also to the north, was *fortunate advancement*. Hence the Sabæans of Babylon and Canaan came to regard the constellations and planets, which were seen or fancied to be ever moving, as moving to some earthly purpose; and therefore (by an easy and flattering step, which it required small persuasion from the priesthood to teach them to take) as Blessers, or advancers of fortune or happiness. They were at first venerated as the *signs*, and subsequently as the *causes*, of happiness:—of terrestrial* happiness, I mean, for (as is observed in a former essay) there exists no evidence that these Sabæans had attained to the knowledge of the doctrine of immortality: and notwithstanding that the occasional configurations of the celestial phenomena, would awaken fears—Fear is the necessary concomitant,—the inseparable companion, of Hope: and Superstition was but the more attached to its *Blessers*, on account of this very agitation of contra excitement; and the more disposed to acquiesce in, and cherish, a denomination which kept the high lights on the favourable and flattering parts of the picture.

We will now turn, if you please, to some of those texts of the Bible, which by the English translators have been thought to mean groves of sacred trees; but which, as I have ventured to assume, cannot in many places have this signification, and it may therefore be more than suspected, ought not in any. For, on the other hand, if *Blessers*, understood as *astral signs of fortunate advancement*, will suit and adapt themselves to the context, in all those places where in the Hebrew bible we read *Ashre*, or *Ashire*, this consistency of co-operative meaning will be strongly in favour of our supposing that these words ought to have been thus rendered. But of this—not knowing, and apparently not caring to know, the localities of Canaan, or to dwell upon them in any other

* I observe that Michaelis is of this opinion. He says, “the subordinate deities too were worshipped, not with a view to obtain from them the happiness of a future life, but merely temporal benefits and *blessings*.”—*Comm. on the Laws of Moses*, Art. 33.

than that sort of general way to which vague notions of odium might attach—the translators appear not to have been solicitous, or not able, to make satisfactory sense. There was light shining in these texts, but their darkness perceived it not, or chose not to appear to perceive it.

Surely, my dear Sir, we should no longer, as antiquaries, shut our eyes; but use the chrystal spectacles which you have brought home. And we may the rather anticipate such a result, and that people will look for themselves, as former objections to the Hebrew term which is in question, no longer exist: I mean the objections which rigid and unreflecting devotees might in their exclusiveness, oppose, to a construction of the words which might be thought favourable to the superstitions which it was wished to root out; for Grove, carried with it no such promise or implication of Hebrew happiness, as Blessers, or stellar signs of fortunate advancement. Astrology too is become obsolete. And he who shall be able, may now freely and fearlessly send a piercing ray of thought to the very heart of the subject.

Let us therefore examine, at least some few, of those texts wherein the idolatrous meaning of the word *Ashre* is more evidently concerned, and ascertain, if we can, and as far as those instances will carry us, whether the "*Groves*" of the English translation of the early Scriptures, ought not to be superseded by *Blessers*, considering that word as the synonyme of celestial dispensers of good fortune?

But first, let us observe, that in several passages of the Psalms, and in the book of Job, the word אֲשֶׁר, *Asher*, or some modification thereof, occurs; and occurs where it would be egregious nonsense to render it by Grove, or any thing relating thereto; and accordingly, in these places it is not so rendered. For example—in the beginning of the 1st Psalm, we are not presented with, *Engroved* "is the man that walketh not," &c.—as a consistent adherence to the system of the translators would have required: but we are presented with the genuine meaning of the word—namely, "*Blessed* is the man that walketh not in the counsels of the ungodly." In plainer terms, or, to bring the matter home, as to those ancient Hebrew minds to which the psalm was addressed—Prosperity, or

advancement in good fortune, awaits the man that walketh not in the counsels of the ungodly.

In Deuteronomy, ch. xvi. ver. 21, "Thou shalt not plant thee a—*Grove* of any trees,"—say the common Bibles; but, on consulting Julius Bate, I find that this text should have been translated, "Thou shalt not *fix up* an *Ashre* of any wood;"—or else (for between these two meanings, this learned Hebraist expresses himself with some doubt) it should be, "Thou shalt not fix up an *Ashre* *under any tree*,—near unto the altar* of the Lord thy God."

Here, since it would not be easy to assign or imagine any sound reason why natural trees should be thought to be so incompatible with sanctity, as not to be permitted to grow—where we know that they sometimes did grow—near an altar† of Jehovah;—if an absurdity be not admitted, an hiatus is left in the meaning of the sentence, which the idea of an astral dispenser of good fortune—a Sabæan blesser—an instrument to answer some of the purposes for which celestial spheres, planetaria, and armillary machines, are now used, completely fills up; and this meaning is, in the present case, rendered the more credible and evident, by the denunciation which follows a few verses afterward, against those who shall presume to worship the Sun, Moon, or any of the host of heaven.

In the course of the mysterious and prophetic blessings uttered by Moses just before he ascended mount Nebo, the word *Ashre* is frequently repeated; but the passages are so variously rendered by Julius Bate, by Dr. Geddes, by Mr. Bellamy, and in the Vulgate, that I dare not trust myself in the literary labyrinth. If the English reader should refer to the 33d chapter of the Deuteronomy of the common Bible, or of any or all of the above, he will of course make his own comparisons; the He-

* That they might not fix them up elsewhere—in places that might not be esteemed exceptionable,—is not expressed.

† "An oak that was by the sanctuary of the Lord" is mentioned in Joshua, ch. xxiv. ver. 26, with reverence: and from ch. xxii. ver. 29, we learn that the altar of Jehovah was near this sanctuary. Nor could the turpentine-tree (according to Geddes) or oak, of Mamre, have been far from the altar erected by Abraham.

brew scholar will refer to the original text. But neither will omit to remark, in the blessing invoked by Moses on the descendants of Joseph, who had himself been a great "Diviner," the expressions,—according to Bate (who wrote without the least knowledge of such branching instruments as are figured on the Boughton cylinder),—the expressions,—“the precious things of *heaven*; the precious *fruits* brought forth by the *Sun*, and the precious things thrust forth by the *Moons*.” And when the prophet arrives at the future destiny of the tribe of *Asher*, whose name is the very synonyme of blessedness—the critics will still less omit to remark, that the parable or metaphor employed by Moses, appears to be one of these very machines. “In *oil*”—predicates the sacred penman—“In oil shall he dip his *foot*; of *iron* and *brass* shall be his *bars*.” At least, I may venture to call this an intelligible meaning, which is more than can be said of the lame explanations of this text, of the generality of annotators on the Bible. But in fact, the name of this patriarch emits a strong and unextinguishable light, which falls directly on our subject, and completely puts out their glimmerings.

It will be observed that these machines have, each of them, but a single foot; which, bearing a considerable incumbent weight, the ease of its motions must have been assisted by oil, as is still usual where heavy machinery turns on a pivot; and which would be yet more necessary in the case of iron or brass bars, than where the Ashres were constructed of a less ponderous material.

“Of iron and brass shall be his bars,” shews that the inferior species of these machines were of some inferior material, presumptively of wood; which corroborates the scriptural accounts of the mode of destruction of certain Ashres, at which we shall soon arrive. Or, it may have been that the upright pillar, or stem or axis, of the superior sort of Ashres, were of wood, and their “bars,” or curved branches, of metal; while of the inferior sort, only the joints and sockets, and probably the foot, were of metal.

And this blessing of Moses, is in strict, and very apposite, conformity with what we have previously read of the patriarch *Asher* himself; for when he was born, we read that his mother, Leah, exulting over her

childless and less fortunate sister, exclaimed, "Ah! *happy* am I—the daughters will call me *blessed*. And she called her son's name *Asher*."

It may here be noticed, that according to our Bibles, two Hebrew terms should occur in this sentence, which are nearly synonymous; בָּרַךְ (*Baruch*), and אֲשֶׁר (*Asher*), *Happy* and *Blessed*: but we say in a general way that, to be blessed is to be happy. Fortunate advancement affords us the middle term. He whose fortune is advanced, is made happy; happiness being the sentiment resulting from fortunate advancement,—as is here expressed by Leah. Yet these words happy and blessed are, in colloquial intercourse, occasionally used for each other; or, as if they were precisely synonymous: and so they are in the Scriptures, idiom having been apparently the chief guide of preference.*

Proceeding onward, we next find as follows, in the book of Judges, ch. iii. ver. 7, "And the children of Israel did evil in the sight of the Lord [Jehovah] and forgot the Lord their God, and served Baâlim; and—the Groves," says the common Bible; but "Baâlim and *Asherim*," are the Hebrew words in this place; which, unless I am mistaken, means that they served the Host of heaven, regarded as Blessers; of which the Ashres (or *Asherim*, to use the Hebrew plural termination) were the representing signs or symbols. It seems scarcely sense to say that they *served* the *Groves*; as groves at the most, could only be supposed to be places—not objects—of devotion. The Groves might indeed have served the apostate Israelites; but how could the Israelites have served plantations of trees?—reverentially, I mean, as they served Baâlim. Whether Baâlim (or *the Lords*) in this text, are meant for the two greater luminaries, spoken of conjunctively? or were the planets, which Astrology still occasionally designates "*Lords*?"—we will not stop to discuss at present.

In Judges, ch. vi. ver. 25, 26, the Lord Jehovah says to Gideon, "Throw down the altar of Baâl that thy father hath, and cut down the *Ashre* that is by it."—"And build an altar to the Lord, upon the top of this rock.

* Their meaning is identified by Bate (see p. 54 of his "*Critica Hebræa*") and by Parkhurst. The latter says of בָּרַךְ (in p. 84 of his *Lexicon*) "To *bless*, as God doth man, or a superior his inferior: To give, promise, or wish, him *happiness*," &c.

—And take the second bullock, and offer a burnt sacrifice with the wood of the Ashre which thou shalt cut down.”

28. “And when the men of the city arose early in the morning, behold the altar of Baâl was cast down, and the Ashre was cut down that was *by it*; and the second bullock was offered upon the altar that was built.” —Verse 30 repeats, “the altar of Baâl and the *Ashre* that was by it.”

Now had the Ashre been a grove of trees, the probability is, and the rule of literary propriety would be—that, as an altar, (a rude pile of stones in those days) is a far less considerable thing than a grove—the altar would have been described as being *by* the grove, and not the grove by the altar. It is true, Gideon had ten servants at his command; but then, there was an altar of stone to break down; another to build—upon the point of a rock, as it would seem; and a bullock to sacrifice. And all appears to have been clandestinely and completely performed in one night, before “the men of the city arose,” and they “arose *early* in the morning.” This seems to be work enough to occupy the time, without cutting down a grove of trees also. Reflect on the practicability of ten men secretly cutting down a grove of trees—even a small grove—and having the ceremonials of a burnt sacrifice to attend to; an altar to erect; and a bullock to kill and to consume—all in a single night, after other men had retired to rest, and before their early rising in the morning. And this they performed with undetected caution. Again, the quantity of wood contained in such a machine as I have supposed an Ashre to be, would be about enough to light up a sacrifice, whereas (it cannot be necessary to insist, that) the wood contained in a grove of trees would be far too much. That I may not weary attention here, or seem episodical, where I may be expected to be argumentative, I pass over a few scriptural mentions of the Asherim that are either of less determinate character, or where they are mingled with the introduction of other Hebrew terms of unsettled meaning—in order to come to an anchor before it be dark.

In the first book of Kings, ch. xviii. are mentioned (in ver. 19), “the Prophets of the Groves.” In the Hebrew bible—Prophets of the Asherim—“four hundred, which eat at Jezebel’s table.” I may here observe, that it is far more likely that the Sabæan host, whose silent and symbolical oracles were the Ashres, should have *prophets*, than that groves

should. We can easily imagine an office of divination, or foretelling, to belong to prophets (that is, to priests assuming that designation, and those pretensions) of the Host of Heaven: circumstances indeed compel us to this inference: we know (since the divining instruments were not vocal, but visible) that such an office must have existed, and we find that it did exist, among the star-worshipping nations—an office, which having constant reference to future accomplishment, might cause them to be termed *prophets*, or *see-ers*; for according to Isaiah they “did *peep* and *mutter*.” But what could be the office of four hundred prophets of groves? What *prophetic* office could have been attached to groves of trees? requiring too the ministration of 400 within a single city?

In fine,—the Ashres (or Asherim) as we have seen, were regarded as Blessers; and the Ash-aphim were those who officially declared the blessings bestowed by the Astral deities, whom Herodotus says were at first termed “disposers.” Sir William Drummond repeatedly terms an *Ashaph*, an *Astrologer*: Julius Bate says, “the word Ashaphim is often construed Astrologers, though it rather means wise men, who were to explain the mysteries of religion,” which is in fact and in the present case, the same thing, notwithstanding that Bate, being ignorant of the ancient existence of astrological machines, or divining implements, among the Canaanites—might not know it. The *Critica Hebræa* also traces the relation between *Ashaph* and the Hebrew word שפח (*Shaph*), for *Lip*. And the whole philology is ably, and very exactly, borne out, by the more profound erudition of D'Olivet. We have already attended to the meaning of the first syllable of *Ashaph*, according to the literal construction of this great linguist; and שפח, *Aph*, he says, is a root constituted of the *sign of power*, united to that of *speech*.*

In the 2d book of Kings, ch. xvii. ver. 8, &c. the history of the aberrations of Israel under king Hoshea, is related (for the second time): “They walked in the statutes of the heathen whom the Lord Jehovah cast out from before them” (namely the Canaanites), “and they set them up images and *Asherim* in every high hill and *under every green tree*.”

16. “And they left all the commandments of the Lord their God, and

* He who would *study* this subject, and become acquainted with D'Olivet's amplifications of these meanings, may consult his vocabulary of Hebrew radicals with great advantage.

made them molten images, even two calves; *and made an Ashre and worshipped all the host of heaven*, and served Baâl. And they caused their sons and daughters to pass through fire, and used *divination*."

Here it is observable 1stly, that Ashres were *not images*; for "they set them up images *and* Ashres:" which Ashres are also mentioned conjunctively with the host of heaven, as if they had been the necessary and ostensible agents, or customary instruments, of the adoration paid to the stars. 2dly, That the Ashres were *not groves*, or they could not have been set up under every *green tree*. Nor would any Hebrew phrase tantamount to "set up," which is here applied at once to the Asherim and statues, have been applicable to groves at all; since trees are of gradual growth, and are not removable after they have attained age and dignity sufficient to entitle them to belong to a grove; for we should not here think of compromising; or bringing down "the pomp of groves," to the paltriness of shrubberies. 3dly, That the Scriptures, on other less important occasions, are more specific with regard to trees; mentioning oaks, cedars, acacias, &c. Is it not singular that they never condescend to mention designedly, and that they never incidentally name or hint, the species that have been supposed to overshadow the idolatrous Druids of Canaan, and confer gloomy horror on their abominable rites?—By what strange perversion should this supposed gloom, which must have excluded the sight of the stars, have been conceived to be instrumental to their worship? Again, Sir, when we come to consider the rapid succession of pious and profane Hebrew kings; the short reigns of some of them; the consequent alternations of the national faith of the Abrahamic race; and those successive destructions and replantations of the sacred groves, that have been supposed to be historically reported,—of how very quick growth must these real or imaginary groves have been! Trees do not now-a-days grow thus rapidly in the Holy Land: or in any land.

The Rev. G. Townsend, in his learned dissertation "on the Origin, Progress, &c. of Idolatry,"* writes that, "The origin of *Grove-worship* has never been exactly ascertained." How should it? It has never been ascertained, because it could never be satisfactorily traced backward through these remote ages and nations. In short, the proposition,

* Classical Journal, No. XLVI.

that grove-worship existed among the Babylonians and Canaanites, has been erroneously taken for granted in a general way; and when you come to particulars, the illusion vanishes. There was no such thing as "grove-worship," as I shall continue to shew; for I believe the prejudice to be deep-rooted, although the groves were not.

Fourthly. The phrase, under every green tree, ("They set them up groves [Ashres] under every green tree"), is used doubtlessly to shew the frequency of these Ashres, and how the land was polluted with them—but still,—used by the Hebrew writers without such literal and palpable inconsistency, as would be setting up a *grove under a green tree*. Now an orrery, or armillary machine, such as our Sabæan engraving presents, used for purposes of divination,—completely rectifies the misnomer in these texts, where the retention of the word grove in its ordinary acceptation, is at best perplexing, not to say absurd; and its denomination coming from the same etymon with *blesser*, seems to explain *why* the Ashres were used in fortune-telling, or "divination," as it is expressed in the above passage from the 2nd book of Kings. Is there any other thing, having rational pretension to be esteemed an Ashre, that was susceptible of being set up under a verdant tree? Putting the supposition of St. Jerome out of the question, I know of none.

In the same 2nd book of Kings, chap. xxi. we read that "Manasseh (of Judea) reared up altars for Baâl, and *made* an Ashre, (as Ahab and other of the kings both of Israel and Judea had done before him) *and worshipped all the host of heaven*, and served them"—the mention of the Ashre being apparently introduced, as affording the customary means of manifesting veneration for the host.

"And he built altars for all the host of heaven.

"And he made his son pass through fire, and observed times.

"And he set a *graven* (or carved) *image of the Ashre that he had made*, in the house of which the Lord had said to David and to Solomon his son, In this house and Jerusalem which I have chosen out of all the tribes of Israel, will I put my name for ever."

The Ashre and the host of heaven are here again conjunctively mentioned, as if the former had been regarded as instrumental to the worship of the stars. The apostate king reared up altars for Baâl; made an

Ashre, and worshipped the host of heaven. The Sabæan Ashre appears to have been erected within the precincts of the temple, where the altars also were built: but beside this—perhaps immovable—armillary machine, which for the purposes of divination, Manasseh had constructed in the courts of the temple, he had also a small copy, or “graven image,” of the Ashre within;—doubtless to assist in the celebration of those Sabæan rites, which were performed in the interior during his idolatrous reign, and which are described by Ezekiel; for there can be no reasonable doubt that the idolatries which the prophet saw in vision on the banks of the Chebar, were those with which the temple at Jerusalem had really been polluted.

Before we proceed farther, my dear Sir, let us remind ourselves in passing, that the beautiful and interesting opal which has enabled us to resuscitate this lost scriptural meaning, is a *graven image* (as I have hitherto supposed) of an Ashre, and was found in the very country—of Canaan—which was the scene of this ancient superstition: but that which Manasseh introduced into the temple, we must of course suppose to have been of much larger dimensions: and judging from ulterior circumstances, it appears to have been a carving of wood.

The observing of *times* has by the scriptural commentators been generally, and I should suppose justly, understood to mean a superstition by no means uncommon, and which one might wish had been confined to the ancient and the heathen world—namely, not to undertake any enterprise of moment, but at a fortunate conjuncture of the heavenly bodies, which the Ashres afforded (as they supposed) the means of ascertaining. We know that this species of superstition is still sufficiently prevalent among the eastern nations. Malcolm, Morier, Ouseley, Porter—all the oriental travellers, attest it: even in the west of Europe, it is in some places scarcely abolished. And we know that before printing was invented, and before tables of the planetary movements were circulated, that instruments must have been used for this purpose still more than at present. That a nation of star-worshippers, then—a nation too which could build navies, and erect such edifices as the temple of the Tyrian Hercules, and that of Solomon, were without such instruments, is scarcely a tenable supposition.

We soon arrive at another of those alternations with which the mind of the Hebrew populace was, in those remote ages, so much and so frequently distracted by the piety and impiety of their kings.

In chapter xxiii. verse 4, &c. we read that young Josiah commanded to be brought "*forth out of the temple of the Lord* all the vessels that were made for Baâl and for the Ashre, and for all the host of heaven, and he burned them without Jerusalem in the fields of Kidron, and carried the ashes of them unto Bethel."

"And he *brought out the Ashre from the house of the Lord*, without Jerusalem, unto the brook Kidron, and burned it at the brook Kidron, and stamped it small to powder."

Could this Ashre have been a grove, as the common Bible expresses? The thing is physically impossible.

In the next verse we read that "women wove hangings for the Ashre."

But thinking people will naturally inquire, of what materials could the sacred vessels and the Ashres that were thus destroyed have been constructed? I answer (as I have before intimated) of metal and of wood, but chiefly the latter. When works of stone are spoken of, as the *altars* erected by Manasseh, the text does not inform us that fire was employed in their destruction, but says that they were *beaten* down and *broken*, and the *dust* cast into the brook Kidron. Some of the vessels mentioned were in all probability libation vases of metal—perhaps of potters' earth, and the divining instruments, as we should naturally infer, would consist of a mixture of metal and wood, the wood greatly predominating, which when burned, would produce "ashes," and would be susceptible of being "*stamped* small to powder," by which I understand, trampling with the feet, as an external and public manifestation of the utter contempt and detestation in which the Sabæan Asherim were held, by a young and zealous iconoclast, who—simpleton!—had not the least taste for, or foresight of, our antiquarian researches. It would appear that the king, Josiah himself, stamped; and that he himself cut down those sun-images of the 2d book of Chronicles, of which I shall presently treat.

The Ashre, however, previous to its destruction, had been contained in the interior of the holy temple, and could not therefore have been a

grove of trees: beside,—women wove hangings for the Ashre; would any visionary ever have thought of any thing so irrelevant as weaving hangings for a grove of trees? I interpret that these hangings were either embroidered with figures of the constellations, or were simply covering draperies used, as we now cover an armillary sphere, to defend it from dust. But the former is by far the most likely, as *such* hangings, when disposed around the Ashre by the hand of science, would give emphatic significance to the curved movements of the branches of the machine, and form a chamber of imagery, within which the Sabæan aspirant might study, or the Ashaph might appear to predict, with peculiar advantage.* In a later age, when the poem entitled “the Phenomena” of Aratus, was introduced at Rome by Cicero and other leading characters, we read, that it became the polite amusement of the Roman ladies “to work the celestial forms in gold and silver, on the most costly hangings:” and this had previously been done at Athens, where concave ceilings were also emblazoned with the heavenly figures, under the auspices of Antigonus Gonatas.

Another short instance which goes to prove, not only that the Ashres were not arrangements of growing trees, but were manufactured by the hand of man, shall conclude what I think it necessary to offer on this topic. In “the burden of Damascus,” as sung by the prophet Isaiah, we read, “At that day [of threatened desolation] shall a man look to his Maker.”—“And he shall not look to the altars—the work of his *hands*; neither shall he respect *that which his fingers† have made*—either the groves (*Ashres*) or the “*Sun-images*.” Here the Ashres and Sun-images are both designated as being of human fabrication. They are *conjunctively*

* Parkhurst goes so far as to suppose the *Beths* of early scripture to have been a kind of pavilions, inclosed by means of hangings; which, of the inferior temples, or *capella*, of Canaan, was probably true, and he refers to the text cited above from xxiii. Kings for an example that the *בתיים* were “*hangings* to form a receptacle for an idol; *canopies*, or some things of that kind.”—*Heb. Lex.* p. 88.

† A distinction seems here to be intended between the work of *hands* and that of *fingers*. To pile up stones is designated as the work of hands; to fabricate works consisting of smaller parts, and calling for more ingenuity, as the work of fingers.

mentioned *as they present themselves in our graven image*; and they are *again* conjunctively mentioned, as if they were usually to be found together, by the same prophet, in the text, "The Ashres and Sun-images shall not stand up."

This evidence appears to me to be sufficient in quantity, and sufficiently convincing, to establish my proposition, that the Hebrew Asherim were not groves, but were the divining implements of the Sabæans of Canaan. Yet I cannot pass here what is contained in the 74th Psalm, and in a passage of Genesis, not yet adverted to; and I ought perhaps to have bestowed earlier notice on those *הַמִּנִּיחַ*, or *Sun-images*, of the Old Testament, which tally so exactly with the engraved Sun-image of our cylinder, and with others which I shall subsequently exhibit.

Those scriptural Sun-images, as we have seen, sometimes accompanied *Ashres* (as we cannot easily imagine they would have done, had the Asherim been Groves); and sometimes they surmounted what has been erroneously translated "High-places;" but which, in the Hebrew Bible, is written *בָּמֶה*. In Leviticus, chap. xxvi. ver. 30, we read, "I will destroy your high-places" (*Bames*) "and cut down your *Sun-images*." In the 2d book of Chronicles, chap. xxxiv. ver. 4, "They brake down the altars of Baalim in his (king Josiah's) presence, and the *Sun-images*, that were on high above them, he cut down." And in Ezekiel, chap. vi. ver. 3, "Your *Sun-images* shall be broken."

The 74th Psalm alludes to a somewhat later period of the Hebrew history, having been written apparently at Jerusalem, during the season of the captivity. Between the Bible translation and that of our common-prayer-book, I may be permitted to observe in passing, there is so much difference, and at the same time so much obscurity of meaning in certain passages, that we may reasonably doubt their correctness; yet there is evident allusion to the sacred furniture of the temple, and vivid glimmerings (not to say more) of resemblance between some of its descriptions, and the divining implements (the star-blessers) of the Sabæans. I copy the following from the Bible version. The Psalmist, lamenting the dilapidated state of the holy places of Jerusalem, and particularly of the temple, says, "The enemy hath done wickedly in the sanctuary"—But

I should first have observed, that in the 9th chapter of the 1st book of Chronicles (vv. 28, 29), we read that certain of the Levites had the charge of the ministering vessels, and that some of them were appointed to "oversee the vessels and all *the instruments of the sanctuary*."

"The enemy (says the author) hath done wickedly in the sanctuary. Thine enemies roar in the midst of thy congregations; they set up their ensigns for signs"—

But Bate renders this latter member of the sentence probably with more fidelity; certainly with more pertinence. He writes, "they set up *their* signs, for signs:"* that is to say, the Babylonians, after subjugating Judea, had appointed Chaldean priests to preach to the Jews, which the Hebrew psalmist chooses to stigmatise by the term roaring; as amongst ourselves, we occasionally hear, in the way of opprobrium, of the bawling or roaring of certain sectaries, who set up their signs for signs—that is to say, who would substitute energy of lungs, for energy of religious sentiment.† And these Chaldeans set up their own signs in Jerusalem, instead of the signs which Israel had been accustomed to venerate as marking the mutations of the seasons; which, however, were still *astral* signs, for according to the author of Genesis, the stars *were* "for signs and for seasons," and in fact there never were and never will be, any other, that will bear to be compared with these in point of efficiency.

What may at the first view seem more extraordinary, especially to those who read Bibles as the victims of the Holy Inquisition were taught to tell beads‡—these astral signs were represented, or their movements

* Critica Hebræa, p. 382. Not that it seems to be of much importance which of these terms is used in this place: the ensigns or military standards of the star-worshipping nations, being believed to have consisted of astral signs.

† In the close of the same 74th Psalm, Jehovah is invoked as follows: "Arise, O God! plead thine own cause. Remember how the foolish men reproach thee daily. Forget not the voice of thine enemies. The tumult of those that rise up against thee increaseth continually."

‡ This class of Bible readers, unfortunately for the best interests of religion and society, is very numerous. They read without being impressed with any particular meaning; without inquiry; and without caring to inquire. Their reading is the mere occupation of indolent minds; and some of them have the complacency, or the folly, to flatter themselves that in such Bible-reading, there is more religion than in honest inquiry.

were geometrically demonstrated, by HEBREW *Ashres* of the same *general nature* with those of the Sabæans! Yes, indeed were they: startling as to some the assertion may appear. I might call the description of Solomon's temple, and the prototype which we must suppose to have existed, of that revolving machinery which accompanied Ezekiel's cherubim, to bear me witness; but I rather choose here to cite from the Pentateuch; and in Genesis, chap. xxi. ver. 23, we read that ABRAHAM *erected an Ashre*.

It is fortunate for my present explication, for antiquarian science, and for the final interests of truth, that this fact is plainly and indisputably recorded. And with it is recorded how and why this came to be done without the least stain or reproach on the piety of the patriarch. Reproach! Quite the contrary. "Abraham set up an Ashre,"*—or, according to the common Bible, "planted a grove,—in Beer-sheba, and *called there upon the name of the Lord, the everlasting God!*"

It was lawful,† then, in the days of Abraham, and no impeachment of the patriarchal monotheism, to erect or plant an Ashre; and doubtless it was also lawful to use the Ashre, or instrument so erected, in astronomical computations, provided it was done with due reverence and submission to that great superintending cause of ALL, whom Abraham invoked at Beer-sheba.

Neither has Moses expressly prohibited *such* use; though it is not clear that he ever promoted the erection of other Hebrew Asherim, than within his own tabernacle. At the place where, and where only, sacrifice might be religiously offered up, it seems likely that all orthodox information would be appointed to be obtained. We have before noticed the words of this great legislator, when at the foot of mount Nebo, he finally

* This anecdote appears to confirm the averment of Josephus, that Abraham was learned in the science of the stars. Josephus adds, that he instructed the Egyptians in astronomy; but this it is not so easy to suppose.

† Does any reader object here that the Hebrew laws were not yet promulgated? Michaelis has shewn that laws of custom, derived traditionally from the usages of their ancestry, were in force among the patriarchs. But who has ever questioned, or who will now question, that in what concerned religion, Abraham drew from the fountain head?

blessed the tribe of Joseph, (who had himself been a great diviner), and that of Asher; and Josephus, Origen, and others, have thought that astronomical considerations were, not out of his view, in fabricating the sacred candelabrum with its seven planetary fires. We may further observe, that, in declaiming against the idolatries of Canaan, he does not absolutely proscribe altars and Asherim; but says, "Ye shall destroy *their* altars, and break down their images, and *cut* down *their* Asherim."

The stars—the "lights in the firmament of heaven" were by the omnipotent voice of the Elohim himself, appointed to be "for signs and for seasons, and for days and years." You (Sir William) will not think I advert to this text too often, when you reflect how frequently it has been repeated by others, and how much forgotten. The stars were to the Hebrews—for it is so stated in their own cosmogony—for signs and for seasons: the proper use of the Asherim was, for ascertaining and manifesting the movements of those signs, and the progress of those seasons. And, since the prayers and the invocations of Abraham, and, in later ages, of the Hebrew Ashaphim, were addressed to Shaddai or to Jehovah, as the creator of those stars—there could be no idolatry, nor more impiety, in consulting an Ashre under such circumstances, than could now attach to the reader in referring to his celestial, or to his armillary, sphere.

As the learned Michaelis has observed, "It was at that time" (the time of the Hebrew republic) "the universal propensity of mankind to pry into future events; and it was no less universal to regard religion as a means of gratifying this curiosity. If God, therefore, desired effectually to keep his people from being carried away by the torrent that overflowed other nations, and from seeking insight into futurity from superstition or false religion, it was necessary that true religion should really give them what every false religion pretended to give." A little further on he shews that the only distinction, and the only means of distinguishing, between the predictors of the surrounding nations, and those of Israel, were, "speaking in the *name* of a *strange God*, and predicting what did *not* come to pass."*

But the legitimate use of the Asherim was, the regulation of the public

* "Commentaries on the Laws of Moses," by Sir J. D. Michaelis, Art. 36.

calendar; and in Article 199 of his Commentaries, Sir David is yet more strictly to our present purpose. He says, "It is true, that God who sent Moses as a legislator to the Israelites, and honoured him with immediate revelations, then knew the length of the solar year, much more accurately than any mortal will ever calculate it, and even to the smallest fraction of a second, and might therefore have instructed Moses on this point, to a degree of perfection which we shall never attain. This, however, is not God's usual plan of procedure; for he leaves to men's own industry the discovery of physical and mathematical truths; nor would he be acting kindly, or as a father, desirous to educate his children, and to habituate them to reflection, if he were by a prophet to inform them of the *exact* length of the solar year, and other truths of a similar nature which they might discover themselves, and which are at the same time not indispensably necessary to their well being. In fact, the world was at that time so deficient in the mensuration of time, that they did not so much as divide the day into hours, and still less hours into minutes."

"The greatest wisdom, therefore, that a legislator could then manifest, consisted in his remarking that the solar year as then known, was defective—in fact, extremely defective; and of course, in not, on any account, introducing it into use, but rather leaving his people to abide by the lunar year, which was at any rate familiar, and in so far pointed out by celestial phenomena; correcting, however, its defects, as far as possible, and approximating it on all occasions to the solar year."

"Now this is precisely what Moses did. He had it not in his power to adopt a *strictly astronomical* solar year, and thereby to correct the irregularities of the lunar year; but he availed himself of the aid of an economical solar year, which never admitted an error of a whole month without correcting it, and which every husbandman could easily comprehend."

Hence we are led to perceive the proper use of such instruments as are here under our consideration. I am not supposing, however, that all the ancient Asherim were alike, and that the Ashre which was erected at Beer-sheba exactly resembled that which is represented on the Boughton opal. On the contrary, I can prove that those of the Sabæans differed in

form and moving from each other; and even now, whilst revising this very sheet, have received fresh evidence of the fact of their locally differing, through the obliging liberality of the Baron Denon.* Indeed, since our own planetaria, orreries, and armillary spheres, exhibit local differences of construction, it is but reasonable to suppose the same of the astronomical instruments of the Sabæans and the Hebrews. The ancient machines must have varied with the means and current science of the machinists and the astronomical priesthood; and, according to the particular purposes to be answered. Some were calculated to explain, and to assist in computing, the motions of the planets; others to have the same effects with regard to the changes of the seasons, and the circumvolutions of the Moon, and to assist in the enregistering as well as ascertainment of such matters. I should imagine that the Asherim of the Hebrews were surmounted by "the *name* of the Lord Jehovah," expressed in Hebrew characters,—which *contained a literal mystery*,—where we behold a "*Sun-image*" in those of the Sabæans. Let the reader refer here to those passages in the lamentations of the Hebrew poets, where the phrase "*the name of the Lord*," occurs, (as it not unfrequently does). In particular let him observe the mingled sentiment of woe and detestation, that is felt by the author of some of the Psalms, when the Babylonian invaders had violated the sanctuary and cast the name of the Lord to the ground.† I suspect that it was chiefly the Sun-images which were on high above the stellar symbols of Canaan,—where the name of Jehovah appeared surmounting those of the Jews,—that were regarded as peculiarly heterodox and abominable. Their erection being a direct and emphatic pronouncing of Baâl, as the Lord of *Saba-oth*, instead of the true "Lord of Hosts," who "rode upon a cherub and did fly," we find them rancorously stigmatised and proscribed by the pious, and the Asherim themselves that

* I propose to myself the honour of publicly addressing this distinguished traveller, artist, and antiquary, on the subject of the interesting antiques with which he has recently favoured me,—but I fear I shall not find room in the present volume.

† Turning to the "*Critica Hebræa*" in the course of revising the present sheet, I have the honour to find myself agreeing with Julius Bate in regard to the *name* of the Lord being inscribed between the Cherubs of the Jewish Sanctuary. He says in p. 288, "They tell us not what the appearing of Jehovah on the mercy-seat between the Cherubs was, "*It was the word Jehovah.*"

had administered to purposes so revolting and polluted—causing the Hebrews to forget their God—destroyed with the Sun-images and other idolatrous simulacra: the very gold that had overlaid such, being pronounced by the Levitical Law to be thenceforth hateful.

After all, it may happen that the chief difficulty with the majority of readers, will be to believe in the ancient existence of such instruments. It certainly might have been expected to be so, had I not exhibited the ocular proof with the argument. We seem to live too near to our own spheres and planetaria, and it may be, too near the current of prejudice and vulgar declamation against the superstitions and idolatries of the heathen, to abstract ourselves sufficiently for the uninterrupted flow of such reasoning. But for my own part, I should find it far more difficult to believe that men and nations, whose attainments in the arts and sciences have been repeatedly proved, and especially of late by Sir William Drummond, in the *Classical Journal*—in short, that the architects and astronomical priests of such temples and palaces as adorned Thebes, Babylon, Tyre, and Jerusalem, were without instruments of the kind, than that they possessed such,—even if we *had not* the ocular fact before us.

Returning to the regrets of the Psalmist, it would appear that the Babylonian conquerors and colonists who had possessed themselves of Jerusalem, proceeded from smaller to greater sacrilege, and at length carried fire and defilement into the sanctuary and into the synagogues. “They have cast fire into thy sanctuary; they have defiled, by casting down *the dwelling place of* THY NAME to the ground. They have burned up all the synagogues of God in the land. We see not *our signs*: there is no more any *prophet*; neither is there among us *any that knoweth how long*.”

I think this text pretty clearly evinces, that it was among the duties of the sacerdotal office to announce the existing or current state of the calendar, and the coming changes in the seasons; that within the adytum, or oracle—or somewhere within the sacred precincts,—were kept their astronomical means of divining or computing those changes, and that this was done according to certain celestial *signs*, which were acknowledged as such by the Hebrews. Indeed we have already seen from

a text in the Chronicles, that there was in those days an appointed order of Levites, whose duty it was to keep the instruments of the sanctuary clean and in order; and Ezekiel (in chap. xlv. ver. 8.) reproaches his country with neglect of this duty, in terms which shew it must have been regarded by the pious as of importance. In the name of the Deity, he says, "Ye have not kept the charge of mine holy things; but ye have set keepers of my charge, in my sanctuary, for yourselves," meaning, that the civil and rural observances of the signs had been disconnected from the religious, and were all that remained. In truth, the very psalm or lament, that is here under our review, is itself further proof of what I have advanced above, concerning the *Ashaphim* and *Asherim*; for it is superscribed "Maschil of *Asaph*"—but this requires some explanation.

The Biblical commentators have treated of the inscriptions which are prefixed to some of the Psalms, with considerable uncertainty. Among them, Mr. Horne, one of the latest and best, writes, "with the name of Asaph, a very celebrated Levite, and chief of the choirs of Israel in the time of David, (1 Chron. xvi. 4, 5.) twelve psalms are inscribed; viz. the 50th, and from 73 to 83 inclusive. But the 74th and 79th cannot be his, because they deplore the overthrow of Jerusalem, and the conflagration of the temple. Either therefore they are erroneously ascribed to him, or were composed by another Asaph who lived during the captivity."

It appears to me that here are at the least two mistakes in this passage, and that the psalms in question are neither written by the celebrated Levite whom Mr. Horne mentions, nor by any namesake of his. In the first place, these pre-inscribed psalms are, in the older English Bibles, severally headed, "A Psalm *committed to* the Sons of Korah," or "*committed to* Asaph;" which I dare believe is nearer to the meaning of the original Hebrew, than is the modernised translation, and which shews that these psalms of questionable authority bear the names, not of their authors, but of those who were appointed to sing or perform them in public: and in the next place, the psalm which is here chiefly in question, (the 74th) can neither have been composed by the Asaph, who during the reign of David "made a sound with cymbals," and is also named as a singer; nor (as far as appears) by any other individual of

that name,—because it is superscribed or addressed “*Maschil* of Asaph,” and this performer is elsewhere styled “*Maschil* of Ethan,* the Ezrahite,” and in another place “the chief musician upon Mahalath Leannoth.”

My general inferences in this place are, that none of the Psalms preceded by the word Asaph, are the compositions of an individual Levite of that name, but that all are simply directed to be sung or performed, either by the chief *Ashaph*, or by that sacerdotal order which were styled *Ashaphim*, [by Cruden and some others written *Asaphim*] of whom *Maschil* was in his day the chief, or, as the Hebrew and the older English Bibles express, that they were “*committed to*” the *Ashaph*, he being responsible for the judicious selection of the performers. Hence *Maschil* might in one place be with propriety designated as of Ethan (the probable country or town of his birth), and in another, as *Maschil* of the *Ashaphim*, or *Maschil* the *Ashaph*, which the translators might compromise—not knowing, or not caring to acknowledge, the existence of an order, which they might fear would confound the Hebrew astronomical diviners, or pronouncers of celestial blessings, or superintendents of the calendar, with those of Babylon.

I am not sure that the individual of David’s time who is mentioned with honour in the 1st book of Chronicles, was other than the chief Blesser, (being also a musician). He might be *Ashaph* both by name and office; the office being, or becoming, hereditary, and the Jewish names generally significant. But we need not strain at a gnat. There is in fact no difficulty here. The first Levites were so named from Levi; and from that day to this, many who have held the office have borne the name. And as we read of no *Ashaph* of earlier date, it might not be unfair to conclude that the *Ashaphim* of subsequent times, have been so called from the celebrated singer and utterer of heavenly blessings, who lived during the reign of David. As the Levites were from Levi, the *Ashaphim* may have been descended and named from this *Ashaph*. However, whether, or not, the name be derived from the office, is here of small importance.

* Psalm lxxxix. The sacred penmen have often more ways than one of writing the same name. In the preceding Psalm, this musician upon Mahalath is designated “*Maschil* of *Heman*, the Ezrahite.”

The prescribed duties of Aaron and his sons, as those duties are specified in 1 Chron. xxiii. 13, were, to minister before the Lord, and "to BLESS *in his name*, for ever,"—which is in strict conformity with the example of their great progenitor, who erected the Ashre, at Beer-sheba. But what else do we read in this venerable book? In chap. xvi. ver. 5, we read that David appointed certain of the Levites to *minister* (a vague term certainly) before the ark of the Lord, and to *record*, and to thank and praise the Lord God of Israel—*Asaph the Chief*:" and in v. 37, "So he left there, before the ark of the covenant of the Lord, Asaph and *his brethren* [Should we not understand here, his Co-ashaphim?] to minister before the ark, *as every day's work required*." I request that the words marked in italics throughout the present paragraph may be remembered.

Proceeding onward to the dedication of Solomon's temple and the induction of the ark of God into the oracle, we find mentioned, among those who were present on that great occasion, "all them of Asaph, of Heman, of Jeduthun, with their sons and their brethren—being arrayed in white linen."

"*All them of Asaph, of Heman*," &c. does not well express, and may not be intended to express, that individual Levites of those names were present: however, as this was within a few years of David's appointment, the affirmative might be argued: but what can be said, when we arrive at the next far-famed dedication and passover in the reign of Josiah, which was not until about four centuries after that of Solomon? "There was no passover like to that, kept in Israel from the days of Samuel the prophet, neither did all the kings of Israel keep such a passover as Josiah kept. And the singers, the sons of Asaph, were in their place according to the command of David; and *Asaph*, and *Heman*, and *Jeduthun* the king's seer."

As no individual priests of these names, can be supposed to have continued to live for those four hundred years, is it not fair to infer that these were the names of offices, and that what is meant by the chronicler is, that the Levites filling these sacred offices, were present and in their places on this solemn occasion:—The Ashaph, the Heman, and the king's seer. Hebrew names are often written with discrepancies in the Bible. Asaph,

according to the Jewish enunciation, would be *Ashaph*. We are therefore brought round to the Hebrew etymons *שא* and *אף*, which when conjoined, have already been explained to signify utterers or declarers of heavenly blessings; and are also brought round to the *אשרה*, or astrological *Blessing* apparatus—so that we may now advance by easy paces, to the further explanation of the text “We see not *our signs*, there is no more any prophet; neither is there among us any that knoweth how long;” a text which as we meditate on its author’s meaning, kindles, and becomes radiant with Sabæan light.

The case of the men of Judah, which is alluded to in this lamentation on the dilapidated state of the temple and synagogues, was very similar to what had happened, a little more than a century earlier, in the brother kingdom of Israel, where after its subjugation by Shalmanezzer,* those colonists whom he sent to repopulate the dilapidated and desolate cities, “set up their signs for signs;” or, as it is expressed in the 2d book of Kings, ch. xvii. vv. 29, 30, “Every nation made gods of their own. The men of Babylon made Succoth benoth; the men of Cuth made Nergal, and the men of Hamath made *Ashima*.”

I take these to have been the astronomical signs—some of them perhaps the names of zodiacal signs, in their respective countries,—upon whose heliacal risings and settings the changes of the seasons were supposed to depend. The Hebrew astronomers (or Ashaphim) appear still to have chosen to adhere to the ancient *Cherubic signs*, which I here assume to have been astronomical; and to that system which had ordained Leo and Aquarius—the *Lion* and *Man* of Ezekiel—as the signs of the solstices; while the better informed astronomy of Babylon, chose not to dissemble the precession of these solstices; and knowing that their colures had now passed into Cancer and Capricorn, insisted on superseding the Lion and Man, the former by an Ass and foal, the latter by a fish-tailed Goat; which figures, in the planispheres of Chaldea, surrounded the stars of Cancer and Capricorn. I possess engraved examples of both of them; and Miss Porter’s Babylonian agate, from which the reader will find an impression copied in page 284, is one of those examples.

* Probably this name should be spelled *Salman-assur*, i. e. the Assyrian Solomon.

Whether there were Hebrew mystics (or Cabbala) during the ages of Solomon and Ezekiel, who possessed, and kept to themselves, the knowledge of the precession of the equinoxes? is no where recorded, but is not improbable. How, indeed, should it be effectively recorded, since, if the mystics kept any archives, they were never made public? We gather nothing of the form of the cherubim from reading the Pentateuch. This looks a little like the designed concealment of mystics, notwithstanding the surmise of Dr. Watts, that their form was too well known to need describing. To those *who saw* the carving and embroidery of the tabernacle of Moses, doubtless their *form* was known; but neither their form nor meaning has been imparted to posterity: and we must grant that Ezekiel, in treating of the cherubic animals, either suppresses their astral reference to the "gates of heaven," or does not perceive it. On the whole, I beg to submit that there appears to have existed among the Hebrew Ashaphim a probable attachment (such as prevails in Europe at present, and such as appears always to have prevailed among the classical nations) to *the more ancient signs* of the changing seasons; which, although it might be termed civil, or rural, among the Greeks and the Egyptians, appears to have partaken of the nature of a religious attachment among the Jews. And the mystery which attended it might possibly be held to be the more abstruse, from a consciousness on the part of the Ashaphim that these ancient signs no longer tallied with the astro-nomic phenomena, and from a knowledge that the people were too poorly versed in that science to receive the advantage of thorough explanation—just as modern masses are, in some parts of Europe, placed in the hands and minds of certain catholic devotees, instead of the holy scriptures.

These suppositions not only give consistent intelligibility of meaning to the placing of the ancient signs Taurus and Leo, within the temple erected by Solomon—who lived while Aries, and not Taurus, was the place of the equinoctial colure; and Cancer, not Leo, the place of the solstice—but also to the cherubic* animals of Ezekiel, who lived in a later age, yet still while the Sabæan year opened with the sign Aries.

* The whole of this reasoning concerning the cardinal zodiacal points, as connected with the cherubic animals, rests very much on the supposition that the stars which are now those of

But how does this accord with the men of Babylon making Succoth-benoth? I apprehend perfectly well: but before I explain this, it may not be improper to remind ourselves, that every star-worshipping nation appears to have had its own peculiarities of worship, arising out of geographical and other local circumstances, and most of them to have adopted some patron, or tutelary, *sign* or constellation, whose transits with respect to the horizon, the meridian, and the Sun, marked the mutations of the seasons—as its peculiar deity, or rather sub-deity, the Sun himself being regarded as the supreme Lord and leader of the Sabæan host.

Hence, as I have in effect before stated, the profound veneration of the Egyptians, for the constellation which we now call Bootes, and which they called Osiris. He was their national and established celestial sign, by whose place in the heavens with respect to the Sun, was regulated and governed all their sacred festivals, and all those manual, maritime, and agricultural operations, the seasons for which are now known by the calendar—the calendar itself being still dependant on the celestial signs. And hence, notwithstanding that Osiris is variously displayed within the recesses of the Egyptian temples, the solar orb is sculptured as shining with sublime but mysterious reference to the soul of the Mundane system over every portal. Like the wise observations and “the dark sayings” of Solomon, all the hieroglyphics within were “beheld *under the Sun*,” and no hierophant or devotee could pass to the interior without being reminded of the superior deity, and bending in previous homage to the lofty orb of luminous effluence.

Hence too the men of Babylon, in arbitrarily imposing on the Samaritans their own signs for signs, “made Succoth-benoth,” which is generally agreed to have been the cluster of seven stars which appears on the present opal. A hen and chickens is by some authors supposed to have been their ancient hieroglyphical symbol or representative; but no hen

Scorpius, had been constellated as an Eagle in the zodiac of Abraham and his grandsons, which Sir William Drummond goes near to demonstrate on the authorities of certain Hebrew writers and of scriptural facts: yet to sculptured monuments we must look for confirmation, or contradiction.

and chickens have yet made their appearance among our Sabæan engravings, or on any other that I have yet seen of the *unquestionable* monuments of antiquity: and the words Succoth-benoth, I believe, literally signify *tents of the damsels*. Concerning the stars themselves, however, there exists no doubt. They are the same which the Greeks and Romans called the Pleiades; and Vergilia; the poet of Job, Kimah; the Arabians, al Thuryaia; and whose heliacal rising was hailed by most of the oriental nations with grateful or rapturous acknowledgment of their sweet influence and their promise of genial abundance. The Sun, the Moon, and these stars, marked, in those countries, the broad outline or contour, of the annual changes of the Asiatic seasons. When the stars of Succoth, Kimah, or al Thuryaia rose with the Sun, or (as it is expressed in Cooke's Hesiod)—

“ When the Pleiades of Atlas born,
Before the Sun's arise illum'd the morn;”

they knew that the Spring season had returned; when they set, those people were equally apprised that the duties of Autumn were to be performed.

And now we may the more easily understand why the men of Babylon of the age of Salmanassur, set up this little cluster of stars as their peculiar sign. The vernal equinox* was no longer there. The triangle of Musca would have been much nearer the true mark—but the imperfect science or (more likely) the national prejudice of Babylon, continued to adhere to their long venerated sign. I believe I have elsewhere in this volume argued, or shewn by retrospective computation, that the period of the popular reign of the Pleiades as leading stars of the Sabæan year, reached to the era of which we are here treating, notwithstanding that the solstitial colures had moved into Cancer and Capricorn. This might at first appear somewhat paradoxical, as the Pleiades are known to have been long reckoned among the stars of Taurus; but we must bear in mind that this little bland and conspicuous cluster, are so detached from

* In using the term *equinox*, I by no means intend to say that the diurnal light and nocturnal darkness, was *exactly* divided, on the day when these stars rose heliacally; or that the ancient Sabæans possessed, as we do, chronometrical means of knowing this. I mean only that the astronomical mark of the commencement of their vernal season, was as above stated.

the Hyades and the stars in the horns of the Bull, that as viewed in the heavens, they appear a constellation in and by themselves, and may possibly have been so reckoned by the Chaldeans and the Ashaphim of Canaan: but whether so or not, it may easily be seen by the globe, that in the latitude of Babylon they rise with the earliest stars of Aries, while the meridian crosses the tail of Capricorn: so that they remained among the men of Babylon the astronomical mark of the commencing vernal season, for somewhat longer than the period of their rightful reign. And when I came to try this problem by a globe mounted on a new principle, and which admits of my removing back the arctic pole circularly, in proportion to any given distance of time, I found it to be still more the case than with a common globe, from the greater obliquity of ascension of those stars.

The Babylonians then were nearer the truth than the astronomers of Judea and Samaria: but there were among the Samaritan Hebrews those who made it a point of religion or of policy not to be persuaded of the rectitude of an invading enemy:—no uncommon sort of people, certainly. But, “We see not *our signs*,” laments the Psalmist. Need I continue to argue that celestial signs of the seasons are here meant? What other signs could be meant? Have I been led away by any unexpected sparkling of a novel hypothesis? Do I fancy a cherub, while I pursue an ephemeron? Can I only sojourn here for a day, or may the ground be dwelt upon? Has the reader any kindred doubts or misgivings? I think he will find it difficult to meditate on the descriptions of the details of the interior of Solomon’s temple, (uncritically translated though they are), and those of the re-edified temple as seen in vision by Ezekiel, with their zodiacal animals and palm-trees so repeatedly mentioned, and the armillary, or revolving machinery which was attached to the cherubim of the latter, and which are idealised (as the commentators agree) from what was really executed within the Adytum or oracle of the former—without supposing that they had astronomical references: What other than astronomical occasions could David, Solomon, and Hiram, have had for such numerous repetitions as appeared in their temple, of Taurus and Leo—the more ancient “gates of heaven”—that is to say, signs of the vernal equinox, and the summer solstice? Let the reader reflect on these

and on the "chapters," bowls, "pomegranates," &c. which stood on the cippi, or pillars of the porch; let him think of the palm-trees mingled with zodiacal signs, of the interior: let him revolve in his mind the mystic machinery that was attached to the cherubim of the oracle.

The prophet Ezekiel says of his resuscitated temple and its decorations, as beheld in vision, (chap. xli. vv. 18, 20.) "It was made with cherubims and palm-trees, so that a palm-tree was between a cherub and a cherub, and every cherub had two faces; so that the face of a man (Aquarius) was toward the palm-tree on one side, and the face of a young lion (Leo) toward the palm-tree on the other side: "It was made through all the house round about, from the ground unto above the door, were cherubims and palm-trees made."

These alternations ran along the interior of the wall, and were simply carved and overlaid with gold. I do not imagine that the branches of these palm-trees were moveable in the manner of an Ashre, which they so much resemble in general appearance; but others may think differently, and I am not certain. My notion is, that there were six carved palm branches on either side, springing from an upright stem (so as to represent half the tree in relievo, as growing toward the spectator) between every two cherubim; which, although not movable, would be well understood to possess a certain astronomical meaning, as symbolising the number of months between the heliacal rising of Leo and that of Aquarius.

But of the machinery which accompanied the larger cherubim of the *Oracle*, whose wings extended so* far, I may perhaps be allowed to entertain and express a different opinion. I think this was susceptible of motion, and came under the denomination of "instruments of the sanctuary."

"It came to pass (says the prophet) that when he (the Almighty) had commanded the man clothed with linen, saying, take fire from between the *revolving machinery*, (translated *wheels*,) then he went in and stood by the wheels.

* The wings of these cherubims spread themselves forth twenty cubits!—2nd B. of Chronicles, chap. iii. ver. 13.

“ And when I looked, behold the four wheels *by* the cherubims; one wheel by one cherub and another wheel by another cherub.”

“ And as for their appearances, they four had one likeness, as if a wheel had been in the midst of a wheel.”

In reading this text, let the reader dismiss the idea of a literal wheel, and think only of machinery susceptible of circumvolution, like the spokes or branches of our Ashre, which may be observed to possess also a capability of *inner* motion, by means of its lateral hinges; in fact it has two central or pivot hinges, which we might call naves, as well as two side hinges, and these two naves possessed no doubt a power of separate motion, or why should they have been there?

And concerning the *eyes* with which the cherubim and wheels are (in verse 12) described to have been covered—“ their whole body, and their backs, and their hands, and their *wings*, and their wheels, were full of eyes round about”—let the reader recollect how ridiculous, rather than mystical, appear those ancient Bible cuts of this subject, where the wheels and the cherubim, wings and all, are thus speckled over with human eyes. I fancy that the zodiacal signs of which the cherubim consisted, had their *stars* inserted—in the way of burnished asterisks, perhaps, or small circlets (bearing resemblance to eyes) and that the peripheries (or felloes) of the wheels, were broad circumscribing zones, having perhaps measured degrees, or perhaps the places of the principal individual stars—(those of the lunar zodiac it may be, or *Mazzaloth*) perforated, or otherwise specified. When the precession of the equinoxes once came to be discovered or recognized among the Hebrew Ashaphim, it may easily be conceived that zodiacs thus perforated, would greatly assist them in computing, and in explaining to the Levitical tyroes, the advancement of the stars in longitude, and would greatly facilitate those intercalations, which would be necessary to the equation of solar and sidereal, with lunar, time; and to the rectification of that greater cycle of “ *Mazzaroth*,” of which I have already treated. They might thus adhere to their ancient signs (as astronomers do at present) while they admitted, and availed themselves of, the truth. My notion of the whole is, that what Ezekiel had really seen within the sanctuary, was represented to him in

vision, as if animated, magnified, and endued with locomotive power. In the genuine character of a vision, it transports him in some degree from the representative signs, to the celestial and sublime originals. In vision these are mingled—dream-like; and the rapt language of prophecy promotes the amalgamation. But my readers will decide, each as he may be able and willing, for himself. I shall here quit this mystery, lest my critical friends, or my *friendly* critics, should find or should feign, vision within vision, not less perplexing than “wheel within wheel.”

Yet before we turn to other matters, you will permit me to offer a word or two concerning those golden orreries of Moses and Solomon, which I ought perhaps to have introduced in an earlier page.

Those orreries or planetaria—which in the English Bibles are called candlesticks,—when compared with the Asherim, shew that the astronomical instruments then in use were of two kinds at least. The one bearing reference (as I have already explained) to the movements of the zodiacal signs in their monthly vicissitudes, the other to the motions of the planets.

That the instrument devised by Moses, or copied by the wise-hearted Bezaleel and Aholiab from a pattern exhibited on mount Sinai—was used *merely* as a lamp with seven burners, is scarcely a tenable supposition. It had other uses, (as Josephus, Origen, and several of the Rabbin, have asserted). Its seven flames did not barely correspond in number with the planets, but more especially corresponded in their arrangement, with that system of the universe which was prevalent in the more ancient times, which now goes by the name of the Ptolemaic, and which announced three superior, and three inferior, planets. The Sun,—expressed by a knop, as the book of Exodus phrases it—that is to say (in common language) a knob, pome, or ball of gold,—stood on the central rod or shaft, surmounted by a flame. On one side of him were three balls and flames, corresponding to Saturn, Jupiter, and Mars; and on the other, the three crescent or inferior planets, Venus, Mercury, and the Moon. Or the arrangement may perhaps have been more conformable to the Copernican fact—for I know not that any thing has transpired to set us at a certainty upon this point:—The Sun in the center may have been surrounded by the other planets in their order of succession, as their orbits increase in diameter;

but they all turned, like the branches of the Asherim, on central hinges issuing from the shaft.

I attend here to the Pentateuch, and not to the prints which we have repeatedly seen of this instrument in Calmet, and almost in every Bible: Not that these prints materially differ from the impress on the Hebrew skekel, or from that sculptured candelabrum on the arch of Titus, which was in all probability copied from the candlestick of the second temple; or probably from the fact,—excepting in one respect. We read that “in the candlestick of Moses, were *four* bowls made like unto almonds.”—Now why were these four contradistinguished from the other three? Why, but because four of the planets were always seen orbicularly; namely, Saturn, Jupiter, Mars, and Sol, and the other three, not. I believe that no previous writer has offered any reason for this distinction, or even noted it; neither is it noticed in the accredited representations.

Whether or not you have heretofore reflected on these coincidences, I think, my dear Sir, you will easily apprehend how astronomical accounts of the movements both of the Mazzaloth and of the Planets might by these means, in the absence of means more scientific, be kept, and rendered, with tolerable fidelity. By moving round the knobs or balls of the Asherim within the hoops studded with their resplendent eyes, or stars, the progress of the months and of the seasons might be enregistered, or manifested to the students in the stellar mysteries: the planetary motions by moving the branches of the candelabrum, with their seven balls and the lamps which surmounted them—as we now use a machine more horizontally constructed, but on a similar principle, to answer the same purpose.

I trust that I shall not be esteemed impious, because I have deemed it impartial and fit on the present occasion, to regard historically and with no better and no other guides than human science and common sense, matters which have hitherto been viewed only through the veil of religion, which, like other veils, is not transparent unless there be light beyond it, and unless it be closely inspected.

Of the stanzas of the Psalmist, “We see not our signs.—There is no more any prophet; neither is there any among us that knoweth how

long:" having explained what I conceive is meant by not seeing *our signs*, it remains that I offer a few words in explanation of the remainder of the sentence.

The Ashaphim of Chronicles were "to minister *before* the Lord, (who in the days of the Hebrew theocracy was supposed to sit in the mercy-seat,) and to *bless* in his name;" or, according to another version, they were "to minister before the ark, and *record*; or again, "to minister before the ark continually, *as every day's work required.*" By way of illustrating what is meant in these texts, may be mentioned that, one of the earliest and most venerated of the authorities of ancient Greece, has entitled the most important of his poems "*Works and Days.*" It treats, as is well known, of those operations, or works of human labour, which are ever dependant on the changes of the seasons, and which of course are periodically performed; and its precepts are derived from the stars.

The Phœnician navigators, the agriculturists and cattle-breeders of Judea, and the merchants of Canaan;—those who, figuratively speaking, ploughed the deep; and those who literally ploughed, sowed, and reaped, the Holy Land;—those Ishmaelites too who traversed the oriental deserts, guided only by the stars—must, in those early ages which corresponded with, and which preceded, the era of Hesiod, have been directed and governed by similar precepts. The prophets and seers of Tyre and Sidon, of Jerusalem, and Damascus, Beth-el, and Samaria;—like the poet and prophet of Ascrea, (for prophets are literally, and by their office, foretellers)—must have apprised their less informed countrymen that

" When from the Tropic, or the winter's sun,
Thrice twenty days and nights their course have run ;
And when Arcturus leaves the main, to rise
A star bright shining in the evening skies ;
Then prune the vine :"

And so of the rest of those approaching duties which depended on the mutations of the seasons.

But when no calendars were, or could have been, published, how were the hinds to enregister, or keep accounts of these sixty days and nights? How were they to know when the Sun had arrived at the *Tropic*?—

They must have been informed by some civil or religious officer, within the scope of whose prescribed duty it lay, to keep account of, and to make public, such matters; and they most likely resorted to the synagogues, and listened with due attention to those Ashaphim whose business it was "to record," and to "minister as every day's work required." In the spirit of the Psalmist, *prophets* must have noted the *signs* of heaven; and have told *how long* to the husbandmen, mariners, merchants, and the rest of those whom such changes might concern.

The further scope of my argument is, that before numerals were invented, and those modern facilities of astronomical and arithmetical calculation were known, which now render it so difficult to abstract our views from our own experience, machines turning on central pivot-hinges, were used for the purpose.

Hesiod, as far as is known, lived within a century after Solomon, consequently from two to three hundred years before the time when the above Hebrew lamentation was probably written: his residence was at the foot of mount Helicon. Bearing in mind that the Jewish synagogues, or places of instruction, were burned by their invaders, and their great temple dilapidated, it is easy to deduce the sentiment which dictated the psalm, from the existing state of public and religious feeling: yet I see not how it is practicable to do so, without believing in the co-existence of astronomical and mechanical means of ascertaining and enregistering the progress of the seasons, and the annually returning phenomena of the starry heavens. How else should we be able to construe the remarkable expressions, "we see not our *signs*; there is no more any *prophet*, neither is there among us any that knoweth *how long*."

When instruments of the above kind were once invented, it would not be very long ere the travels of students and adepts in science, would spread the knowledge of them through the civilised world, since these are the chief objects for which such men travel. We trace the existence, and operation, of these causes, in their effects. Not only has Hesiod mentioned the *Tropics*, under this their Grecian designation, but the poet of the Odyssey has gone a step further, by terming them ΤΡΟΠΑΙ ΗΕΛΙΟΥ; or the *tropics of the Sun*; and by treating of them with a reference to

Scyros,* as if that island had either lain under the Tropic, (which it does not), or had been their place of ascertainment.

Now Scyros, (one of the Cyclades) is the very island of which Pherecydes was a native; and Diogenes Laertius says that Pherecydes, who acquired his philosophical knowledge by studying the abstruse books of the Phœnicians, erected at Scyros a tropical instrument. It would have been natural to have supposed (as Mr. Costard mistakenly does) that Homer had seen, or heard of, the instrument of Pherecydes, if the poet had not lived, even according to the lowest estimate of the era of Homer, more than four centuries before the philosopher. Either therefore the chronology of these events is more out of joint than has hitherto been supposed, or a tropical instrument existed at Scyros before the age of Pherecydes, who was the reputed tutor of Pythagoras, and the contemporary of the prophet Ezekiel. In either event, the tropical instrument of Scyros, contrived as it was "to shew or explain the Sun's ingress into the cardinal points," must in all probability have been of the nature of our Ashre of Canaan, and have been studied or borrowed at first from some Sabæan original.

The existence of the Greek word ΤΡΟΠΑΙ (*Tropics*), found both in Homer and Hesiod, and used also by Thales, seems to imply the co-existence of such instruments; for how should the ancients have known the point, or more properly, curve, of *re-turn*, without some astronomical apparatus, whereby it might be ascertained or verified?

Had Homer been subsequent to, or even but contemporary with, Pherecydes, the whole of these curious passages relating to ancient science, would have been clear. However, the doubts which have so long obscured the era of the father of poetry, I believe have at last been dispelled by the diligent research and discriminating ardour of Mr. Payne Knight. But though we should suppose with that gentleman, the Odyssey to have been written two centuries later than the Iliad, we should still want two centuries more, in order to bring us to the time of Pherecydes. On the whole, I have felt that it was most discreet for me simply to state these matters, together with the two remote facts which must remain to us,

* Odyss. lib. xv. ver. 402.

however they may be determined; namely, that tropical instruments were known in early Greece, as well as in Canaan; and that Pherecydes, who erected—perhaps renewed or repaired—one at Scyros, was the contemporary of that prophet, who saw in vision the brilliant and magnified prototypes of the more ancient places of the tropics and equinoxes, and of the revolving machinery of the Hebrew sanctuary.

We may regard this instrument, ascribed to Pherecydes, as a connecting link of some importance, for not very long after, we read that Anaximander, the kinsman, companion, and successor, of Thales, “found out”—that is, taught, I suppose, after having previously learned from the astronomers of Phœnicia—the obliquity of the zodiac, and *framed horoscopes to denote the tropics and equinoxes*; whence Salmasius conceives that the proper use of “the dial” which has been ascribed to that philosopher, or what has been so termed, “was to ascertain or note *the tropical and equinoctial* points;”^{*} and with reason, for the division of the day into hours, is known to be an invention of subsequent date.

Moreover, the Chaldeans are known to have had an instrument of the kind, which has by the same licence been termed a dial or clock, but which they called הֶלֶף סְדֵרָא (*Heleph Sidera*), meaning, according to Sir William Drummond, “the mutation or transition of the series or order,”[†] and to be understood of time, light, and the seasons; for Parkhurst says of הֶלֶף, that it denotes “passing succession, after, or in the place of; and so, change, renewal:” and of סְדֵר that it is to arrange (in rows) with an allusion to the rays or columns of light.[‡]

The sphere, or more properly, orrery, of Posidonius, which is mentioned by Balbus in Cicero’s treatise; and that mentioned by Valerius Flaccus, as having been erected within the temple of the Sun, were doubtless, improvements on the more ancient machines, of which we have been discoursing. All must have turned like the Ashre of the Boughton cylinder, on central pivot-hinges, and all have possessed, under different local modifications, similar powers of revolutionary movement.

We have now been gradually wending toward those astronomical con-

^{*} Stanley’s Lives of the Philosophers, p. 61.

[†] Œdipus Judaicus, p. 337.

[‡] Hebrew Lexicon, pp. 211, 484.

siderations on which I chiefly rely for confirming what has been advanced on the evidence of ancient records. Before we bestow on them our critical attention, I may perhaps be permitted to take for granted that my readers are satisfied—at least that they are willing to believe—that instruments of the general nature of the graven image which I have the honour to exhibit, were the parents and prototypes of the mystic trees mentioned and alluded to by the prophets and other Hebrew writers, (the Sephiroth, the Asherim, and the Heleph Sidera), and also of that artificial branched instrument, which is mentioned by Pausanias* as having been borne by the Greeks in their sacred processions in honour of the Sun; and were the more remote progenitors of our modern armillary, and celestial, spheres and planetaria.

I omit some other ancient names which appear to me to have belonged in different countries to instruments of the kind, in order not to encumber memory, and because none of these are now to be regarded as *exclusively* proper and right. *Sephiroth* indeed,—notwithstanding I have mentioned it first, I should suppose to be a word of later formation than the rest, invented probably among the Gnostics or Cabbala. It appears to me to be simply and obviously no more than an union of the Hebrew words סֵפֶר (Sephir or Sepher), and אֵיט (Oth or Ath), and literally to mean the book of sacred signs: It was at first a scroll or book, explanatory of sacred mysteries—accompanied perhaps by the delineation of a mystic tree, in illustration of its contents, and connecting those mysteries with certain signs which were conventional among the Sabæan priesthood. To the novices and aspirants, a book of initiation.

Passing other terms then, which may have had their several local pro-

* That this circumstance is mentioned by Pausanias, I have not the least doubt; but I met with it in the first vol. of Sir R. Porter's Travels, p. 547; and I own I have sought for it in vain in the writings of the Grecian topographer. "Pausanias remarks (says Sir Robert) that at the celebration of a Grecian festival in honour of the Sun, an olive branch was carried in the procession, decorated at the top with a globe of brass, to represent the Sun; with a smaller, a little below, to represent the Moon; and divers lesser ones, suspended in different parts of the bough, to represent the stars." I conceive this branch or bough to have been in fact the simulacrum of one of the Sabæan implements which are here under discussion. I don't know what else it could have been; but the reader will of course form his own conclusion.

prieties—instruments of the same general nature may have been occasionally, and in some places, called Heleph-Sidera, and Mazzaloth, not so much, as instruments artificially constructed, but as the abstract representative symbols of the zodiacal signs ; as affording the necessary facilities, and as being in short, the current means of effecting zodiacal computations. But, whatever the nouns, if through these endurable productions of ancient art, we have arrived at a knowledge of the *things* denominated, we have gotten beyond the books of our predecessors, and the sounds by which they were known, become of inferior importance.

Of these instruments or things, there were among the star-worshipping nations, several species, of which each doubtless had its discriminative appellation ; but we will, if you please, limit our present attention to that which is displayed on the jasper-opal. From the upright central rod, bolt, or axle-tree, of the machine, which is immediately beneath the Sun-image, spring twelve little globes or balls, six branching off curvedly on either side, and one of them (the lowest on the left hand side) being from accident or design, imperfectly expressed. My first idea was, that these balls might denote the six summer and six winter months (expressed by their moons) of thirty days each, and that the five or six balls, imperfectly exhibited (but which imperfect exhibition appeared also to have its astronomic meaning) as springing from the angles of the lozenge beneath, signified the intercalary days, by means of which the time-prophets of Canaan, completed the round of their solar year.

My corollary was, that Adad, Baal, or the Sun, presented himself in this hieroglyphic, as lord of the round of time, or of the moving heavens ; which I believe the Chaldeans and Canaanites wrote—the former Baal-rimmon, and the latter Adad-rimmon.

But scholars differ much more widely and more frequently than those who are not scholars are apt to suppose, concerning the meanings of Chaldaic and Hebrew words. Parkhurst says that רִמּוֹן (*Rimmon*) literally a pomegranate, was the name of the Syrian idol or object of worship which is mentioned in the second book of Kings, chap. v. ver. 18, and that it “collectively expressed the fixed stars and the reflexion or streams of light from them.” General Vallancey agrees with him, adding that “the Pagan Irish were strangers to any other idolatrous worship than what their

ancestors brought from the Assyrians, namely, that of the Sun, Moon, and stars; all were included in the general name of *Rimmin* or *Rinnim*, which to this day is the appellation of the starry constellations.* Meanwhile Sir William Drummond says that Rimmon signifies "*the exalted One*"; and adds, "this was a Syrian deity, and probably indicated the Sun in his highest exaltation."† Neither of these interpretations appears impertinent to the figure which is engraved on our cylinder; but Sir William's Rimmon, is precisely the Adad of Macrobius and of the authors of the ancient universal history.

Mr. Bellamy also has defined this remarkable word. He says, "the word Rimmon means, to exalt; to be able to break forth with power on being exalted:" which, although by the way, it be more than a single meaning, is not inapplicable to our present purpose, nor more especially to the *solstitial Sun*, of which I shall presently discourse. Mr. B. continues, "The sacred writers used the word to signify the exaltation and breaking-forth of divine light."

It is nothing new for doctors to differ, nor for those who are not doctors to perceive such difference. My happy fortune in the present instance is, to have discovered a recondite point of agreement between them. No account of Rimmon is more pertinent to the present monument, than this of Mr. Bellamy; but when he comes to speak of Rimmon as a Syrian idol, which was *superseded in the popular faith, by Ben-hadad*; and when he comes to add, his supposition that Rimmon was a serpent, and Ben-hadad, the son of shouting, I can no longer proceed with him. Rimmon was no serpent; but, as Parkhurst and Vallancey have said, a pomegranate; and the *son of Shouting*, is nonsense, or at best, one of those amusing meanings, that

"Play round the head, but enter not the heart,"

because it has, and can have, no foundation, either in analogy, or in fact.—Meanwhile the beautiful fruit which bore this ancient name, presents us with the forms of a sphere surmounted by a star, and we immediately perceive why the *Chaotidim* and the *Ashaphim* might readily have availed

* Essay on the Antiquity of the Irish Language, &c. p. 53.

† Œdip. Jud. p. 288.

themselves of symbols so simple, and at the same time so aptly suited to the expression of astronomical mysteries.

Ben-hadad, is obviously plain Hebrew for the *son* of Hadad; and Hadad, or Adad, (the aspirate being a common Hebrew redundance), is the Syrian solar appellation. There was no supersession, or change of religious faith, took place at the time in this part of Canaan; nor any thing but the ordinary vain, or crafty, assumption of Cælo-syrian royalty, which has already been explained.

I find that about forty-six miles northward from Jerusalem, in the valley of Megiddo, was a town, which is mentioned in Zach. xii. by the name of Hadad-rimmon, the remembrance of which also goes toward reconciling my authorities; for since Hadad or Adad was the Syrian name for the solar deity, and Rimmon for that of an idol collectively expressing the fixed stars with their proceeding light, *Adad-rimmon* must have been the town or *City of the Sun and sacred orbs*, where probably such an Ashre or orrery-instrument as our monument displays—but one whose responses were of more than ordinary celebrity—was consulted and venerated. This may be thought digression—in part, at least; but my readers, I must hope, will pardon the uncertainties and the desultoriness of Hebrew scholarship.

My trains of thought and reasoning, were pursuing these gleams of literary light and glimmerings of astrology; but, when I came to marshal my data, and to try my inferences, as has been customary with me, by the test of astronomical fact—when I came to refer to the sphere itself, and to place myself, as the study of these gems in general require, alternately at the arctic and antarctic poles of the celestial globe—I discovered a remarkable conformity between the curved branches of our antique monument, and the leading lines of the sphere at those annual seasons when the poles and brass meridian are coincident. It appeared that the middle point, or upper hinge of the Ashre, where the upper curves meet the central rod or axis, must be the pole of the Sabæan ecliptic according with the common centre—arctic or antarctic—of the meridional lines of the modern sphere, and being in all probability the remote origin and archetype of those very lines; that the lower extremity or foot of this

central rod, or sacred tree, must consequently represent, or be in effect tantamount to, the pole of the equator, or of the earth! and the ball which surmounts this axis, be the pole of the zenith! all of which at the solstitial seasons, and then only, are thus coincident. I was struck—and I think that every man of science who does me the honour to attend to the fact and its evidences, and reflect on the phenomena, will be struck—with most agreeable surprise, at perceiving the resemblance between this very ancient monument, and those leading longitudinal lines and armillary circles of the modern sphere when thus rectified, which are, and must ever remain, the guides of astronomical science.

To some persons, this resuscitated and sculptured record, may seem to imply the co-existence of a Chaldean or Phœnician sphere; but perhaps it may only be a scientific step toward such an achievement. I can conceive that one of these instruments, turning on pivot-hinges, and fixed in the center of a “Chamber of Imagery” (to use a phrase of Ezekiel)—that is to say, a chamber hieroglyphically covered (perhaps by means of hangings) with representations of the celestial asterisms:—or let us suppose the instrument, with its assumed power of circumvolution, to be erected beneath such a planispherical ceiling as has lately been transported from Dendera to Paris:—It may easily be conceived, I beg to repeat, that such a contrivance would answer many—not to say most—of the purposes of an artificial sphere; being at the same time superior to such a sphere in point of intelligibility, in as far as it did not present the student or aspirant, with convexity, instead of concavity, in studying the vault of heaven.

As these are no trivial matters, it may not be useless to retrace, with a little more of detail, the leading marks of resemblance and of analogy between the antique and the modern implement of astronomy. The reader should here turn to my engraved head-piece to the present essay.

1st. The central rod, or bolt,* surmounted by a small orb, is the line of coincidence between the meridional arc or circle, as viewed from the pole; the axis of the ecliptic; and that of the planet we inhabit. At the

* A learned Hebraist, by nation as well as by study and attainment, writes me that “the *axis* is also called *בֶּרֶךְ* or *bolt*.”

seasons of the solstice, it becomes also the line and representative of the solstitial colure, and of the pole of the zenith.

2dly. Curved lines centering in the pole of the ecliptic are branching off divergently as on the modern spheres; the difference being, that here is only one line, or space, for every 30° —that is for every zodiacal sign, of which, spaces for six are on either side; whereas modern refinement has dictated that the meridional lines shall now be more numerous. But I believe we should come nearer to the ideas which prevailed among the sacerdotal corporation of Chaldeans, with regard to the astronomical measurement of time, if the twelve collateral balls were to be regarded as *Moons*: for the twelve Moons of the Year, are the origin both of the fruits of the mystic tree mentioned by St. John, Dr. Kennicott, and Sir William Drummond, and of the zodiacal signs or mansions.

3dly. What I have already observed relative to intercalary time, may perhaps be regarded as more problematical. The twelve months of thirty days each, were collectively three hundred and sixty: the pendant balls below, susceptible of being counted as five or as six, I thought might each be meant for a diurnal round of time, and that they might hieroglyphically represent and collectively allude to the intercalary days necessary to complete the round of the solar year. The initiated might understand, and might explain by their means, that more than five, or less than six, days, were required to be annually added to the three hundred and sixty; or, in some years five, and in other years six.

4thly. Probably the six lower balls were also calculated to answer other purposes, both of divination and instruction. By representing, as Josephus and Clemens Alexandrinus have declared of the candelabrum of Moses,* those planets which gave names to the days of the week, the Sun himself standing for that of the sabbath, they became highly useful in

* This candelabrum appears, from the testimony of these learned writers, to have been a more simple instrument, of a similar nature to the present. Clemens says, "The candlestick was placed on the south of the altar of incense, by which were manifested the motions of the seven luminaries making their revolutions in the south—for there are three branches inserted into the candlestick on either side, and upon them are lamps," &c.—*Strom.* l. 5. See also Josephus's *Antiquities of the Jews*, B. 3.

all purposes in which this (weekly) division of time was concerned. The three on the right hand side, represented or symbolized the three superior planets (Saturn, Jupiter, and Mars), or whose orbits circumscribed that of the Sun, as was then supposed, according to the Chaldean system; the three on the left, were of course the inferior planets, (Venus, Mercury, and the Moon;) which is probably, after all, the more plausible, and more correct reason, why, in the present instance, one of the twelve moons is bent down from above and made to act a double part.

Of the lines terminated by balls somewhat smaller, which emanate from either side of the solar orb, forming angles of about 60° with the perpendicular rod, I find it more eligible to defer to treat.

Having deeply interested, and in a great degree satisfied, myself upon these points, I became anxious to investigate whether the remainder of the engraved contents of the cylinder, combined as they are with the *Ashre* and surmounting Sun, afforded data for ascertaining the era when it was engraven?—and whether it was a signet used by the Sphragistæ at their solstitial seasons of sacrifice?

These became exceedingly interesting subjects of inquiry, and occasioned me to reflect how valuable, in the estimation of most men, the Arundelian marbles had been esteemed, as sculptured and indelible tests of the chronology of ancient history. Meanwhile not the least suspicion of their having been forged, attaches to the Sabæan engravings.

Comparing the present with an outline of another cylinder, which has been transmitted from Baghdad by the British resident, and which stands at the head of my next Essay, it appeared that the bent line, or small arc, terminated by two little balls, by which the winged orb will be observed to be surmounted, was certainly intended to convey meaning. Some kind of contradistinction was clearly meant by the *scale-beam* being placed above the solar orb in one instance, and the small *arc* in the other; and having satisfied myself that the scale-beam must either be the constellation *Libra*, or that it must symbolically denote the equipoise of light and darkness, at the vernal and autumnal* seasons, I was led to infer that by the small arc or segment was probably meant the *solstice*.

* The reader will find this question discussed in my next letter addressed to Capt. Lockett.

Of three representations, which, for the sake of their "mutual radiations," I shall produce in succession, of the winged orb, two are surmounted by such an arc. You will observe too, that this little arc or curve, is placed immediately over the solar orb, as if to mark the term, or limit, of his progress. Now, as the Sun at the *solstice*, means the Sun at his *utmost advance*; so the Sun at the *tropic*, is literally the Sun at his *curved turn*: and I know not that any hieroglyphical art, could have expressed this station, or transit, more pertinently than we here find it. It is the solar orb at its *ne plus ultra*, and that utmost advance, a curved turn.

Is further evidence required on this point? Julius Bate supplies us with the Hebrew name itself of this solar transit, which was probably technical also to the land of Canaan—and what does it mean?

He says that סבב (*Sibib*, or *Sabab*) means, "*the Tropic*, from the Sun or solar light, going to the south and turning about unto the north:" more literally, "turning about its turning"—that is, if I might presume to explain, Bate's explanation—making its curved transition; or, passing its point of *re-turn*; which is precisely in point to our purpose, and what the hieroglyphical curve expresses.

Returning to our inquiry of, whether the present cylinder was a signet used by the Sphragistæ? it suggests others.—What should we naturally expect would be the devices engraved on those sacred signets of the priesthood? What else so likely as that they should bear reference to the principal occasions of their being used? What devices were the astronomical priests so likely to ordain and display, as those which were intimately connected with, and denoted, the seasons of sacrifice? What, in short, but the accredited celestial SIGNS of those seasons?

Of these—the four principal—often termed the cardinal points,—sometimes the hinges of heaven, and upon which hung "all the law and the prophets" of the Sabæan nations of antiquity—were marked by the annual returns of those stars which *sign*-ified the solstices and equinoxes. I scarcely need to add, that the word *cardinal*, is from the Latin *cardo*, a hinge, or center of motion; and it will readily be apprehended here, that, as heaven can have no *hinges*, literally and strictly speaking; and as the word is of the earth, and far beneath the sublimity of heavenly ope-

rations, its astronomical use and proper meaning, can only have originated with such mechanical epitomes of heaven as were the *Asherim*. The modern term, is derived from the ancient hinged machine.

Having ascertained these matters to the best of my ability, and also the meaning of the winged and radiating orb,—we must next endeavour to discover that of the remainder of the engraved contents of this interesting monument; namely, the human figures; the pointed stars, or asterisks; the small orbs which are in the upper part of the device; and the engraved lines which so conspicuously proceed from them toward the enthroned figure. We can then, with some hope of a successful result, proceed to discuss and detail whether, and in what manner, these hieroglyphics could have been connected with the sacred observances of which we have been discoursing. But this will require me to dip a little into ancient astrology; in doing which I can only engage to endeavour to trespass as little as possible on the patience of the *unastrological* reader.

The seven small orbs that are above the figures, and that nearly touch the upper boundary-line of the engraving, I run small hazard in pronouncing to be the *Pleiades*; the *Succoth-benoth* of “the men of Babylon” and Canaan; the *Al-Thuryaia* of Arabia; the supposed *Kimah* of the book of Job; the *Virgilia* of later times. Of all nations, the stars and welcome signals, of heavenly vernal promise, and whose frequent appearance on the Sabæan cylinders, agrees so remarkably with the frequent mention of them in holy writ, in the oriental poetry, and in the works of those more ancient classic poets who lived while the *Pleiades* led on the returning year, and were more especially venerated. However variously denominated by the star-worshipping nations, Amos, the holy herdsman of Tekoa, writes of them as they present themselves on the cylinders of Sir William Boughton, Mr. Rich, and others that I have seen, simply as “the seven stars.”*

* “Seek him that maketh *the seven stars* and Orion.”—Ch. v. ver. 8, of the book of *Amos*.—This beautiful group were not only leading stars in the time of Amos, but excited additional observation, and derived additional importance, from their passing vertically over the Sabæan climates.

It will readily be perceived that engraved lines, indicating rays, or fluxes, of astrologic influence, pass from these seven stars toward the enthroned and important personage who is introduced at the right-hand extremity of the impression from this gem. But some readers may require a more explicit account of these lines.—

Sir Edward Sherburn, who in his translation of Manilius, writes that

—“ whilst we sing Apollo's self shall play ;”*

yet who pens verses as if he would shew to how little purpose that deity was invoked by an astronomical poet of the reign of Charles II.—has nevertheless enriched his laboured and unpoetical version of “ the Sphere,” with copious and learned notes, in the course of which he explains the doctrines or notions that were held by the ancients, on the subject of stellar aspects, and those consequent fluxes of astrological or congenial virtue, in which those ancients were firm believers, and which indeed are still prevalent among such persons as retain any pretension to the power of astrological prediction. He says, “ the aspects or mutual radiations of the signs and stars, are the habitudes of one unto another in a determinate distance in which they are apt to co-operate ; these are commonly reckoned five in number, and are attributed to the signs and stars within the zodiac, but are *extended likewise* (we may suppose he means with diminished influence) *to the rest*. These Censorinus calls *conspectus* ; the Arabs, *almanter* ;” and in a note to page 18, we meet with these further astrological dogmata—that “ in every asterism, or sign, of the zodiac, a peculiar local *deity* resides, and in every star belonging to one of those constellations, a peculiar *genius*, as the inferior ministers of each deity, whose virtue they believed to flow by an influx in form of a pyramid whose basis contained the whole extent of the asterism.” Sir Edward says this of the Egyptians : I here suppose it to be at least equally true of the Sabæans of Canaan, Chaldea, and Æthiopia.

He then proceeds to explain these fluxes of supposed co-operation, marking their characters and specifying their several virtues ; but the fact to which I wish to direct your attention and to impress on your

* Sphere of Manilius, folio edit. p. 2.

memory is, that these specifications are the same which are to be found in those modern books which treat of the influences of the stars, from Milton's *Paradise Lost*, down to the commonest treatise on astrology; namely, conjunction, opposition, sextile, quartile, and trine. Milton indeed, in conformity both with the popular faith of the orientals, and that of his own European contemporaries, as well as with certain texts of scripture which have already been cited—I might say in conformity with the facts of his universal learning—has given a degree of credit, of elevation, and of dignity, to the stellar science, from which—with the exception of those few who will warmly adopt it—present opinion will probably revolt. After finishing the work of creation, he introduces the Deity, as “calling forth by name his mighty angels,” and giving them

“several charge

As sorted best with present things. The *Sun*
Had first his precept——

To the blanch *Moon*,

Her office they prescribed: to th' *other Five*
Their planetary motions, and aspects,
In sextile, square, and trine, and opposite,
Of noxious efficacy; and when to join
In synod unbenign. And taught the *Fix'd*
Their influence malignant, when to show'r;
Which of them *rising with the Sun*; or *falling*,
Should prove tempestuous.”

Let us next inquire, for whom may be intended the seated and beardless figure toward whom the lines of stellar influence are directed; let us see whether we can recognise her on the sphere as it exists at present? and whether she can have been esteemed as one of the decans, or parana-tellons, of the sign Taurus, to which the Pleiades belong?

It will be observed that she is attired in a richly ornamented habit, which might well be esteemed royal; that she holds forth a garland or circular wreath, which appears to be intended either for stars or flowers, or for a crown of some sort; and that her head is bound by a jewel-fronted

fillet, above which shines a radiant eight-pointed star. Is it Cassiopeia, that

“Fam’d Æthiop queen, who strove
To set her beauty’s praise above
The sea-nymphs; and their pow’rs offended?”

I think it is: but we will, if you please, proceed to a closer examination.

Some of the more ancient appellations of the stars of this constellated queen, both among the Greeks and the Arabs, appear to have been taken partly from the Cathedra, or chair on which she sits* enthroned, as well as to have reference to the enthronement or inauguration of the Æthiopian monarchs, as we shall presently perceive; but the first syllable of her proper name is taken, as I conceive and shall soon proceed to explain, from that of the patriarch Cush, (the grandson of Noah and the progenitor of Nimrod) to whose portion fell that land of Yemen or Æthiopia; and over which, in far distant ages, reigned her, whose beauty and ambition have been sung by Milton, after being immortalised by the most sublime of the sciences.

“The sons of Ham” (the immediate offspring of Noah) “were Cush, Mizraim, Phut, and Canaan. The sons of Cush were Seba, Havilah, Sabtha, Raama, and Sabthecah. The sons of Raamah, were Sheba and Dedan.” All of these latter are, by Volney and others, believed—with great plausibility at least,—to be the proper names, not only of individual persons,† but of tribes and nations, whose geographical situation was between the Arabian and Persian gulfs.

* It is curious that this very ancient chair should so much resemble the old-fashioned modern chairs with high backs: and the same is observable of the chairs on which are seated the sculptured monarchs of Persepolis. But, under the Sun there is nothing absolutely new, saith the preacher.

† Geddes says, “In the Hebrew idiom, the terms *father, son, begot, was born*, imply not always immediate parentage, or filiation. The names in Genesis x. may therefore be those of different colonies, although probably these colonies derived their original appellations from their respective founders.”—*Note to Gen. x.*

The south-western part of this region, stretching along the larger portion of the eastern shore of the Red Sea, has been sometimes denominated *Yemen*, which literally means happy; and as the *Æthiopia* of the orientals, or *Eastern Æthiopia*, was certainly Arabia, we have here distinctly pointed out to us the country which is still called Arabia *Felix*, as being that of the "fam'd *Æthiop* queen." Other proofs of which will arise as our inquiry proceeds.

"The first* star of the constellation of Cassiopeia (according to Sherburn) was by the Arabs called *Caph-al-Chádib*, i. e. *Manus Tincta*," (or the stained hand). To this *stain*, the artist of the present monument, or the Sabæan priest who directed his operations, has not forgotten to allude, in the marked display of the upper, or right, hand of this figure—though the reason why this hand was thus denominated, is lost in the lapses of time and letters: but what I chiefly wished to remark here, was, that this *Caph-al-Chádib* could have been neither of the present hands of Cassiopeia, since there is no star of magnitude in or near them. It shews subsequent alteration of the asterism; to the consideration of which I shall return.

"The second star (of Cassiopeia) is called *Dât-al-Cursa*, i. e. *Inthronata*" (or the enthroned), by which name the Arabs occasionally called the whole constellation:—This star appears to be the present *alpha*, which falls in with the front leg, or foot of the throne, in the illustrative outline which I have introduced a few pages forward.

"The fifth is called *Racba-dât-al-Cursa*, i. e. *Genu Inthronata*,"† or the knee of the Enthroned.

* I cannot find why Sherburn should have called this *the first* star, since it is not the *alpha* of the constellation. It is, however, the first of which he has chosen to treat; and the shining forth in the sixteenth century of her new and wonderful star, may have disarranged the original order and relative importance of the stars of Cassiopeia. I suppose the star meant by our author, to be that which the reader will find in the outline a little further on,—not in the stained hand, but in the arm belonging to that hand.

† Translation of the Sphere of Manilius, folio, p. 29. The last named star falls in with the *knee* both of the modern, and the Sabæan queen of *Æthiopia*, and therefore makes nothing for, or against, an argument which will presently be produced relative to the figure in question having been inverted, since the constellation was first formed.

We now arrive at the remarkable fact, that the more ancient name of this queen, according to the same author, who cites Cicero and Tycho Brahe, was *Cussiopea* (pronounced *Kushiopea*), in the initial syllable of which, we readily recognise the proper name of the patriarch Cush—which probably at the first had some primitive oriental feminine addition, but which has since been terminated by the Greeks in their own harmonious manner. I shall not trouble you with the details of those etymological travels on this quest, which have led to the conclusion that *Cushiopea* literally signified the black or moorish queen *Cush*, or queen of *Cush*.

Tycho Brahe seems to have been in possession of some information respecting the local history of that *Æthiopian* group of northern asterisms to which *Cassiopeia* belongs, which is otherwise lost to the moderns, or at least is hidden from me. With honest pride quoting the Roman orator, he says that *Cepheus* was a great astronomer, or rather a great favourer or patron of the professors of that science; who, in grateful acknowledgment of his encouragement of their studies, gave to those northern constellations the names of the monarch himself, his queen, and his daughter;—that is to say, the grateful astronomers immeasurably overpaid whatever patronage could have been conferred on earth, by raising the royal family to heaven.

Tycho further reports, that in the time of *Cepheus*, those stars which form the constellation *Cassiopeia* rose with the first degrees of *Aries*; from which statement evolves a very interesting astronomical theorem, which only an appeal to a globe mounted, as mine is mounted, could satisfactorily demonstrate.

By the Danish astronomer's mentioning the first *degrees* of *Aries*, he clearly means to speak of the dodecatemorial spaces, or what has been termed the intellectual zodiac: indeed the *stars* of *Aries* may be put out of the question, since they would carry us back to somewhere about the advent of creation—if not beyond it.

I find that when the chief stars of *Cassiopeia* (or *Cushiopea*) arose with the first degrees of *Aries*, the arctic pole of the equator must have been very near the *alpha Draconis*, and the colure of the summer solstice

have passed a trifle to westward of the *delta Leonis*: to come to numerals, it must have cut the ecliptic in Virgo 7° , which is 67° from its present place. If these 67° be multiplied into 72 years, (the rate of precession), it gives a result of 4,824, or about 3,000 years B. C. This is rather too early for the era of the patriarch Cush (whom I am led to identify with the Chepheus or Cepheus of profane history), according to the commonly received Bible chronology,—but not according to that of the Septuagint, which Sir William Drummond, after a critical examination, says he does “not scruple to adopt.”* Josephus too, and the Samaritan text of the Holy Scriptures, agree to this greater age of the world; and we may recollect that, since some astronomers have estimated the rate of precession to be but 71 years and a small fraction of days, to a degree, this would occasion a difference of above half a century in so long a reckoning.

I trust, Sir William, that I am honoured with your sympathy here:—That the solution which I have lain before you, possesses an interest that is at least worthy of the pause we are making. Beside the illustration and astronomical developement of a very distant and curious historical fact, I find it in just coincidence with a computation regarding the date of the present cylinder, which will be submitted to your attention toward the close of the present epistle. As I fall in from time to time with rich veins—which appear to tend toward mines of antiquarian wealth—do I fly off too frequently, or too far, from those little gems which are my ostensible subject? Had I not been persuaded that these little matters were connected with great ones, I should not have solicited yours or the public attention toward them, nor have bestowed on them so much of my own.

We are further indebted to Tycho for transmitting another precious piece of information concerning Cassiopeia. He writes that *under the stars of their canonized queen, the Æthiopians ever afterward proceeded to solemnize the inauguration of the successors of Cepheus*, and this, in memorial of THEIR FIRST MOTHER CUSSIOPEA; in which *very remarkable*

* On this subject the reader should not merely peruse, but *study* what Sir William Drummond has penned in the earlier pages of his dissertation on the zodiacs of Esne and Dendera.

sentence—I adopt it on the authority of the learned Sherburn*—we not only perceive that Cushiopea lived in the primitive ages, but also the probable reason why in the present instance she holds forth a *crown*.

This crown, I strongly suspect—indeed I believe it, for reasons which will follow—to be no other than the *Ataroth* of the ancient oriental astronomy;—the present stellated *Corona Borealis*; a wreath of stars remarkably circular in their arrangement, whose number is that of the wreath of small balls held forth on our cylinder by the queen, and whose rising in the southern latitudes of Asia, is simultaneous with the setting of Cushiopea. These also are remarkable and luminous facts.

Aratus treats of the Northern Crown of course as a *Grecian* asterism, next in order to Boötes; and says that

“Near him a wreath of sacred radiance glows :
The studded stars from *Ariadne* rose :
Once *her* rich crown.

But since I have studied the Chaldean antiques, I have learned to think little of those Greek legends which relate to the heavenly phenomena. In these ancient mysteries, much more is sometimes meant than meets the ear; though not in the present instance, than meets the scientific eye and the reflective mind. The ascendant crown is in beautiful poetic analogy with the commencement of a new reign: How its ascension in the heavens, at certain devotional seasons, in the clear nocturnal skies of this oriental climate, which Voltaire calls “the land of fine nights:” How it must have awakened the loyal and the pious enthusiasm

* Note to the Sphere of Manilius, p. 29. I have not yet been able to trace the authorities of Tycho Brahe and Sherburn, which they ought to have mentioned; for I cannot find that Cicero, whom they do mention, says more on the subject than “*nec stellatus Cephæus cum uxore, genero, filia, traderetur, nisi cælestium divina cognitio nomen eorum ad errorem fabulæ traduxisset.*” Sherburn, though certainly no poet, was a man of profound science and a scholar, as well as Tycho Brahe: and their works cannot be read without a thorough conviction that they were both too honest and disinterested, to put forward an unfounded statement of the above kind. That no purpose of deception could possibly be intended, is clear from Tycho’s adding his supposition that *Cussiopea*, ought more probably to have been called *Cassiopea*.

of a people to whom astronomy was religion! would require a Coleridge or a Byron adequately to conceive and express. I shall not attempt it. When Cushiopea sets, the Northern Crown, having the same latitude with herself, ascends from the cusp of the horizon; and when the constellated queen rises, in Canaan or the Phœnician latitudes, the crown is in its meridian altitude and not far from the zenith. These are mystical and important coincidences. The former is an interesting astrological apposition, independently of its poetical analogies, and happened in the low latitudes of Æthiopia precisely at the season which may be supposed to be specified on our cylinder (as I shall presently do myself the honour to shew):—the latter—the culminating crown with its quartile interchange of radiance with the ascendant stars—a Chaldean adept would pronounce to be the post of highest honour and most potent celestial influence.—Could these correlative circumstances have happened thus, without design on the part of those who first constellated the heavens? We seem to perceive here, the very motives existing in the minds of the Æthiopian astronomers of genius, more than forty centuries ago! They must have ordained that the circular wreath which arose as the Æthiopian queen quitted the upper hemisphere, should be called the *Ataroth*, or Crown, which is in full harmony, or coincidence, with the legal monarchical fiction of modern times that, “the crown never dies.”

Among those *ancient* authorities that are most worthy of credit when the birth-place of the Chaldean superstition is inquired for, there is, as before intimated, a consentaneous pointing toward the southern shores of the Arabian peninsula: Lucian and Cicero, as we have seen, are express in their references to the oriental Æthiopia. Plato, in his *Epinomis*,* is the same. Herodotus and the authorities relied on by Sherburn

* That the Greeks borrowed the first rudiments of their astronomy from abroad, is owned in this remarkable passage from Plato's *Epinomis*. “The first who observed these things was a *Barbarian*, who lived in an *ancient* country where, on account of the clearness of the summer season, they could first discover them. Such are Egypt and Syria, where the stars are clearly seen, there being neither rains nor clouds to hinder their sight. And because we are more remote from this fine summer weather, than the Barbarians, we came later to the knowledge of the stars.” Under the term Syrians, the Greeks comprehended the people properly called *Assyrians*: such were the Chaldeans and the Arabians bordering upon them called in scripture

and by Volney, say, the caste of astrological priests (the Chaldeans) were originally termed Chephenes, and were so termed from Chepheus, the Æthiopian king. Stanley says they were called Chasdim or Chusdim from the patriarch *Chus*.* Mr. Bryant asserts that Chus, and Evechous, were the same:—the *Evechous* of Africanus, he says, is literally *the great Cush*: and it were easy by his etymological process (or even by a process more simple and probable than most of his) to convert Evechous in sound to Chepheus; namely, by transposing the *ch* from the middle to the beginning of this name.

That this *great Lord Cush* must have been without subjects or dependents, at so early a period of the postdiluvian world, may perhaps be objected; but Æthiopia had probably a dynasty of princes of that name in the same manner that Syria had her Adads and Egypt her Pharaohs, and the great patron of astronomy may not have been Cush the first, although the first was probably the canonised Cush. To the constellated Æthiopian king, however, I shall pay more particular and prolonged attention probably at a future day. It is the country over which this monarch reigned, which claims our attention at present.

“That the people of Yemen, known to the Greeks at a late period by the name of Homerites or Sabæans, had a regular government and a series of kings whose origin is lost in the remotest antiquity; that the order of succession was very often interrupted either by civil wars, or by wars with the Abyssinian Æthiopians who *had the same manners and the same language*; that these kings, habitually masters of Yemen, properly so called, were often so likewise of the country of Hadramaut and other frontier†

Cush, and by other writers *Æthiopians*. It is of *these* Æthiopians, and not of the African, that Lucian must be understood, when he tells us that the Æthiopians *first* took notice of the heavenly motions.”—*Costard's Hist. of Astron.* p. 114.

* Cush has been variously spelled as well as Kepheus. We find *Chus*, *Cush*, and sometimes *Cuth*—(the last is perhaps originally a written representation of a lisping enunciation of the name)—but in very remote ages, how should it be otherwise?

† The northern frontier of this Arabian Æthiopian appears to have reached during the patriarchal ages, at least as far as the land of Midian and the foot of Mount Horeb; for the daughter of the priest of Midian—the Zipporah whom Moses married at this place—is in the book of Numbers termed “an Æthiopian woman.”

districts, and had a territory at least six times more considerable than that of the Hebrews before the schism of Samaria; that the first and habitual residence of these kings was the city of Mareb, called also *Saba*; and, that *long before the kings of the Hebrews*, those of *Yemen* had made remote expeditions"—is all asserted in Count Volney's "researches," on old Arabian authorities, and on that of Schultens, and is perfectly consistent with, and even confirmatory of, the engraved contents of our cylinder, whether we regard it as a production of Canaan, or of the oriental Æthiopia.

Indeed the inhabitants of these countries, at the distant epocha of which we are treating, were sprung from the same stock. Herodotus, in the very outset of his history, says, "the Phœnicians migrated from the borders of the Red Sea, to the place of their present settlement;" and in a subsequent part of his work, repeats of them "this people, *by their own account*, once inhabited the coasts of the Erythrean sea, but migrated from thence to the maritime parts of Syria." We are here presented with their own tradition, obtained from the Phœnicians or Canaanites themselves, by the accurate and truth-telling* Herodotus: and we immediately perceive how the nations of Yemen, (or Æthiopia) and Canaan, came to be of the same superstition, and also how very ancient must have been the worship of the Host of Heaven, in the Arabian peninsula, as well as on the banks of the Euphrates and the shores of the Mediterranean.

Mr. Bryant too has commendably bestowed a considerable portion of learning on this obscure part of ancient history, and has adduced other venerable authorities in proof of the early existence of this Sabæo-Arabian

* See Clio, cap. i. and Polymnia, lxxxix. I hazard the above epithet, notwithstanding the severe remarks of some of those who have criticised the father of profane history, and the ridicule of others. Were it only for the light which he has thrown on the ancient signets by his two valuable records, that every Assyrian possessed a signet, and that the sacred victims were sealed by the Sphragistæ, I should feel deeply indebted to him; but all must be indebted, and must ever remain so, to an historian who details what he witnessed with scrupulous fidelity, and who always takes care to afford us the means of distinguishing between what he actually saw, and what he heard, or reports on the authority of others. I believe I have quoted one of the above passages from Herodotus before; but I had nearly forgotten it, and can have no right to expect more from the reader's memory than from my own, upon such an occasion.

people, and their connexion with the Babylonian Chaldeans. Among the valuable results of the last volume of his *Mythology*—(it is but justice to say this, notwithstanding some of his etymological vagaries)—will be found that the Chasdim, or Chaldeans, were descended from Cush, and that they were *ab-origine*, the same people with the Arabians.

In venturing to treat,—or in venturing to attend to those who undertake to treat—of the very remote period when language was only vocal and orthography could not have existed, we cannot forget how heedlessly and how differently the same words are sometimes uttered rather than pronounced, by those who cannot spell, and who live a few leagues apart. Yet, relying thus little on ancient etymological evidence, and in the modern versions of such evidence, I may here beg leave to enter a distinction between the strange, punning, whimsical, vagaries of far-fetched literal conjecture, which are oft-times ridiculous, and the direct and point blank etymon which presents itself along with the records of Plato, Cicero, and Lucian, that *Æthiopia*, or *Ath-opia*, according to Bryant's reading,—was the country where astronomy originated. אֵת or *Æthiopea*, is literally the land or country of mystic, or celestial, signs; in all probability because such signs were there originally worshipped. As many of the towns and mountains of Assyria and Canaan bore astronomical names,* and as the whole land of Egypt was astronomically divided (its nomês being *astro-nomês*), so here, the country or land of Cush was collectively called the land or place of *Signs*: that is to say, the land or place, where the stars were first constellated; where the signs of heaven were at first invented, and were afterward venerated.

Here is no circumlocutory refinement; the primitive word and its meaning having travelled directly down to us from the most remote ages; whilst from Herodotus we learn that *Æthiopia* was also a land of *signets*; for, treating of those *Æthiopians* who (in after ages, certainly) marched under the standard of Xerxes, he says, “they barb their arrows with the same kind of stone with which *they cut their seals*.”

I should be disposed to infer that some, if not many, of the engraved

* Such as Baal-Berith, Baal-Ammon, Beth-Dagon, Beth-shan, and Asteroth-Karnaim. The *beths* being places where temples or tabernacles were erected to Dagon, to the Sun, &c.

eylinders which have found their way to Europe—this of Cushiopia and the solar orb is *perhaps* of the number—may have been brought originally by the caravans from the Oriental Æthiopia, concerning which in modern times our travellers have been able to supply us with so little of certain information. That first Phœnician colony which is mentioned by Herodotus, may, under the attendant localities, the knowledge of which we derive from the early scriptures and other sources of information, easily be supposed to have been a caravan of itinerant merchants, who were induced to take up their permanent abode in the land of milk and honey. I believe that these Æthiopian Canaanites were the first travelling traffickers that the world ever saw;—were those on whose commercial and picturesque processions, infant Nature first looked forth with wonder from her rudest tabernacle; their merchandise consisting chiefly of gold, gems, *thus*, (or frankincense) cassia, and other aromatics, and perfumes; and that the word Canaan, in its primitive signification, denoted *merchants*. Æschylus, in his tragedy of The Suppliants, of which the time is about a century after that of Moses, alludes to them as

“The wand’ring Indians mounted on their camels,
Along the tented plains outstretching wide
To Æthiopia’s cities.”

I have hitherto termed these ancient Cushites, oriental Æthiopians. Perhaps I should have been more clearly understood, had I written Asiatic, or *Arabian*, Æthiopians—but in fact, the initial syllables in the words *Orient* and *Arab*, have precisely the same meaning, and had originally the same sound, the A being pronounced broadly, as *Au*: the variations obtained, during those early ages when every man’s orthography was governed by his own notions of the phonetic powers of individual letters. *Aur*-abia; *Ur*-abia (the birth-land of Abraham); *Ar*-abia, are all from the primitive or radical אר, subsequently written איר—meaning *light* or fire, and so is *Or*-ient, which might be spelled *Aurient*, since it is a literal allusion to the day-spring; the source of *light*—the place of the rising Sun.

The Aurabian Æthiopians then, were the people eastward of the Arabian gulf, and the order of their migrations westward and northward

have been noticed by Hesiod and by Strabo; and retraced by Volney. They were the original "wise men of the east;" and with their gold, gems, frankincense, and myrrh, appear to have travelled the arts and sciences as they were then known and practised.

Assyrian science and Phœnician art, appear to have proceeded from this once happy and flourishing peninsula. Homer sings of "Sidonian art," and of their sculptured ivory and metals, upon various occasions—among them, I believe, the bowl which Nestor presented to Telemachus, and the fastening-ornament of the dress of Ulysses, (an engraved gem,) were both of Sidonian workmanship. Sidon, in Syria, was founded, according to Strabo, by those Sidonians of the coast of the Arabian gulf, who are mentioned by Hesiod: and Dionysius alludes to their parent station in the following lines:

" Upon the great Atlantic, near the isle
Of Erythrea, for its *pastures** famed,
The sacred race of Æthiopians dwell."

I see too, by a note to Dr. Good's learned version of Job (p. 295) that Montucla, (who by the Doctor is pronounced to be learned and modest—though Sir William Drummond does not say so), after the best opportunities of discussing the interesting question of the origin of astronomy;—after reading what Newton and Costard had written in favour of Greece; Bailly in favour of some supposed lost northern nation, and Sir William Jones in favour of Chaldea and Persia,—is of opinion that Arabia was the real parent of the science. I have not met with Montucla's "History of the Mathematical Sciences," nor do I know whether he has the smallest advertence to sculptured monuments, such as are here before us, which so greatly tend to the confirmation of his general conclusion.

Between the geography and the chronology of Count Volney, the scriptural genealogies, and the engraved contents of our antique monument, there exists no dissonance: on the contrary, they are in tolerable harmony; for though Volney traces the Homeritish or Sabæan kings of

* Perieg. ver. 558, &c. The mention of pastures in these verses—Does it not appear to indicate the ancient seat of those invaders of Egypt, who were termed Shepherds?

Yemen, up to twelve generations anterior to Ninus, with a doubtful or fabulous ascent of four others, who, like the antediluvian patriarchs, are each said to have lived and reigned for several centuries, he does not arrive at Chepheus, or the Great Lord Cush.

But let us not sojourn too long in these regions of doubt and obscurity. Had your learned and liberal friend Sir William Ouseley, or had the enterprising Sir R. K. Porter, enjoyed the opportunity of traversing the Arabian peninsula with the same topographical care which they have evinced in their Persian researches, I have little doubt that discoveries would there have been made, deeply interesting to the astronomical, the chronological, and the geographical, antiquaries of Europe. What the former has discovered in the neighbourhood of Bushire, reads very much like vestiges of the same ancient *Æthiopian* people, and renders it not unlikely that their power at some period reached to beyond the northern extremity of the Persian gulf. Gibbon's delightful account of these Arabian regions appears so pertinently and so poetically to belong to a seat of ancient science, that even though my argument should not be thought to derive support from it, the reader of taste who with Milton and with Gibbon can believe so much of a torrid climate, will "bless his stars and think it luxury;" and both him and the writer, after a refreshing turn in these exhilarating groves, will return with recruited attention to the severer considerations that belong to sculpture and astronomy.

"The kingdom of Yemen (he says) displays the limits, or at least the situation, of Arabia Felix."—

"The high lands that border on the Indian ocean are distinguished by their superior plenty of wood and water; the air is more temperate, the fruits are more delicious, the animals and the human race more numerous; the fertility of the soil invites and rewards the toil of the husbandman; and the peculiar gifts of frankincense and coffee have attracted in different ages the merchants of the world. If it be compared with the rest of the peninsula, this sequestered region may truly deserve the appellation of the *Happy*; and the splendid colouring of fancy and fiction has been suggested by contrast and countenanced by distance. It was for this earthly paradise that nature had reserved her choicest favours and her

most curious workmanship: the incompatible blessings of luxury and innocence were ascribed to the natives: the soil was impregnated with gold and gems, and both the land and sea were taught to exhale the odours of aromatic sweets."—I suspect that these aromatic sweets, and particularly the *frankincense*—but perhaps also the *cinnamon*, (or cassia)—which the Sabæans of Arabia annually burned in such immense* quantities in honour of their solar deity,—will carry us with more certainty toward settling the question in favour of the Asiatic Æthiopia, than the records of history; for I never heard that the former of these aromatics was produced in Africa, and have some doubt about the latter.

With what sentiment the Sun received these periodical honours, we are not informed; but Milton beautifully sings, that when the spicy odours were blown by the north-east wind from the Sabæan coast,

“ ——— many a league,
Pleas'd with the grateful scent old Ocean smiled.”

Having ascertained—as I should *hope* the learned would allow—the original name and country of the constellated Cassiopeia and the Corona Borealis, with the analogical and astral reasons of the latter being in the present instance held forth by the Æthiopian queen, we turn our attention to what remains of the engraved contents of this curious monument; after which our present speculation shall close with such astronomical references as may lead to an ascertainment of the era when it was engraven.

The two large eight-pointed asterisks which appear near the upper boundary-line of the engraving, are doubtless intended for stars of magnitude and of ominous presage. That which is a little to the left of the Pleiades, I should suppose to be Al-debarân, which holds this station on the stellar charts, and in the heavens. That which is above Cushiopeia will call for our future attention; but if I am not mistaken, will eventually appear to be the more ancient pole-star.

Of the two human figures which stand before Cushiopeia, as if approaching her, and on either side of Al-debarân, one will be observed to

* *Menhoud*, as quoted by the Abbé Banier in his *Mythology*, vol. i. p. 574.

be a bearded figure, the other is a female who not unfrequently makes her appearance on the Sabæan cylinders. As Andromeda was the recorded daughter of Cepheus and Cassiopeia, and is, of the old forty-eight constellations, the only extra-zodiacal female that is above the horizon under the assumed circumstances of the celestial phenomena, I might perhaps have supposed the present figure to have been intended for that devoted virgin, had I not recognized her in a more unquestionable shape, on other of these cylindrical gems.

From the station occupied by this female, or beardless figure, beneath the stars of Taurus, which station she occupies both on the present gem and on others which I have seen, particularly one which I shall produce at the head of the next essay, from the cabinet of the British Resident at Baghdad—I conceive her to be a lost or displaced asterism, who in the Sabæan system engaged some of the stars which have since been denominated those of *Erydanus* and of *Cetus*. In the Erydanus, of which the name imports the Grecian origin, and that it could not have existed in the older systems, are several important stars, and among them one of the second magnitude, which I conceived to have once belonged either to this female, or her bearded companion. In Cetus, the second star is called by the Arabs *Caph-al-Giedma*; i. e. the *maimed* or *lopped hand*, a name which seems to bear reference to the imperfect hand of our engraved figure, though it has no relevance whatever to a whale or sea-monster. Neither has any Erydanus,* or any thing like a river, as yet made its appearance among the Chaldean antiques that refer to this part of the heavens, except the two streams from the situla of Aquarius.

We are here in quest chiefly of facts founded on the most extensive comparisons that are at present within our reach; and due allowances for our present uncertainties, will in common candour be made. If the resurrection, or importation, of other astronomical sculptures should, as

* In the "Syntagma Arateorum" of Grotius, this asterism (Erydanus) is represented by a human figure of a river god; but a truth which must not be dissembled here, and which is noticed in an earlier portion of the present volume, is, that the figures introduced into the work of Grotius, do not appear to be copied from any antique authorities; nor would I seek to establish an hypothesis upon evidence which I see so great reason to distrust.

they may, prove me to be mistaken in what I am about to assert,—barring this, I should interpret that the male figure also of the present cylinder occupied a station on the astral charts of remote antiquity, somewhere hereabout.

An engraved line appears on the present cylinder—similar to those which seem to conduct the effluent virtues of the Pleiades toward the stars in the head of Cushiochia—which engraved line ascends perpendicularly from this male figure to the Pleiades. It is doubtless meant to indicate some species of connexion; and I submit that it affords ground for conjecturing this figure to be intended for a constellated *Atlas*, the reputed inventor of the sphere; and classical, that is to say, the fabled, father of the Pleiades, otherwise called (after him) Atlantides. Between this figure and the Æthiopian queen, there is an evident, though but faint, indication, expressed by other such lines, of an interchange of radiance, or communication of astral virtue. Now the *Lucida Pleiadum*, and the star *omicron* in Erydanus, are precisely on the same meridian, and are also on that which I suppose to have been originally, (i. e. before the Greeks inverted her figure), the place of the head and upper hand of Cushiochia. “The stars in their courses,” therefore, which “fought against Sisera,” are so far in my favour: but I am not sure whether Time, who destroys all things, may not be against me. I shall endeavour to ascertain the chronology of Atlas in my next paper.

I would willingly have dismissed these two figures for the present, with this short and glimmering notice, (for so I confess it to be), in order that our *denouement* and catastrophe may not be too long delayed; but a friend, whose opinion I respect, has suggested that the female is “the Arabian Zohara, or Mylitta of Herodotus,” and Lichtenstein also, who has the reputation of being learned in oriental lore, has the same idea of identifying a duplicate of the figure, with the Arabian Venus. But who (it may be asked) shall presume of the Mylitta of Herodotus to make any thing else?—Who? Why Mr. Bryant:

———“ whose talents are such,
That you scarcely can praise him or blame him too much.

Mr. Bryant will tell you that the Mylitta of the Babylonians, is Me-

litta, or Melissa. He cannot proceed through a single page—hardly through a sentence—without trusting to these slippery stepping-stones, whether his purpose be to cross a brook, or surmount a deluge. But, he proceeds, “it is the same in purport”—that is, Mylitta, Melitta, or Melissa, is “the same in purport, as Baris, Theba, Cibotus, Aren, Larnax, Bœotus, and Seira!—Further, we are taught that it is in fact a bee, a fountain, an hive, an ark! Here we stop, and our erudition is brought to an anchor on the heights of his etymological Ararat. And this has passed current for correct analysis and critical philosophy!

As I have already intimated, the female figure in question, appears again on a Babylonian cylinder of which Mr. Rich has sent home an outline from Baghdad, and it appears as in the present instance, beneath the chief stars of Taurus. It also recurs, with her *face turned the contrary way*, on a gem of which Lichtenstein has favoured the public with an enlarged outline in his “*Paleographia Assyrio-Persico*,” copied from an antique in the Florentine collection. Perhaps this scholar, or his artist, did not copy an *impression from* the original engraving, but developed and enlarged the device from the cylinder itself; or, if he did so copy, his engraver (conceiving it probably to be of no consequence) did not reverse it on the copper. But it may be that I am pursuing these reasonings too far; since, turning the figure in the representation, might have been one of the current means among the Sabæans, of displaying the difference between one astrological aspect and another.

Lichtenstein, however, as before intimated, pronounces our female to be the Zohara, or Venus Urania, of the Arabians; but in the course of his explications would identify this goddess with the Moon!

Now, on neither of the gems which I exhibit, nor on the Florentine gem, unless I am much mistaken, can she represent either the Moon or the planet Venus, I shall prove, in a future page, that when the Moon was personified, it was quite in another manner; and if, for a moment, we could suppose the planet Venus to be here intended, the next moment’s reflection must destroy the supposition. Her being in the present instance, as I shall soon proceed to establish, posited at least three signs distant from the Sun, would be *disproof sufficient*; for the distance of

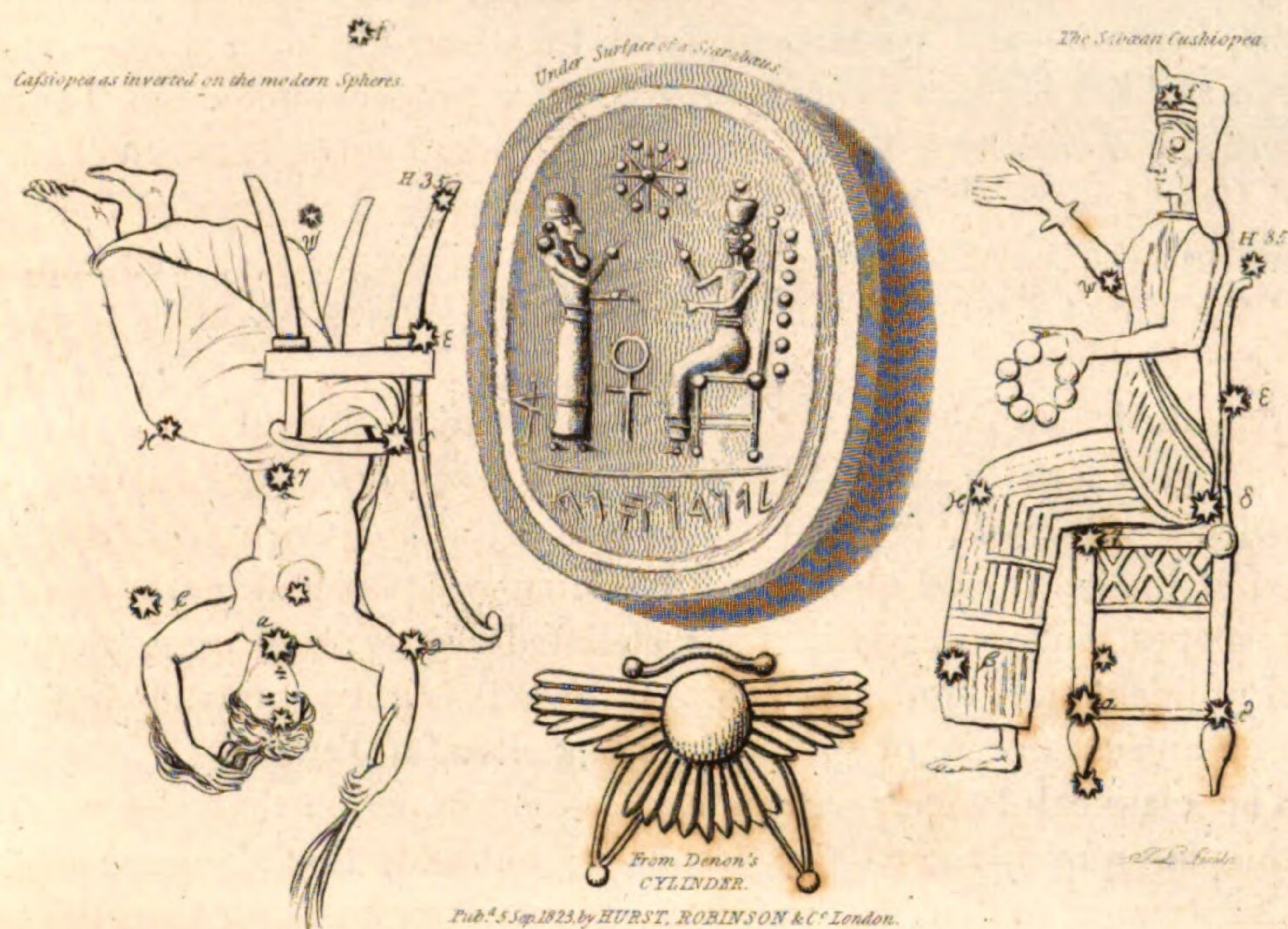
Venus from that luminary, can never much exceed an octant of the sphere.

But concerning Cushiochia, and her habitual association on these astronomical monuments, with *one* of these mysterious figures, I expected reflex light from finding them engraved on the under surface of a scarabæus of green jade, or jasper, which reposes in the British Museum. The engraving is performed in a very uncouth style, consisting of a large proportion of drill-bore work, accompanied by early efforts of the lathe and wheel, or of some earlier and inferior instrument, but the principal figure is evidently that of the seated Cushiochia, and as it bears a verbal inscription on the exergue, I confidently anticipated more or less of antiquarian information, when I should find a scholar able to read it. Alas! in this I have been disappointed. None of my oriental friends on this side the British Channel, have been able to decypher it.

If, as has been supposed, the aborigines of Egypt were of the lank-haired Æthiopian race, who in very remote ages crossed the Erythrean sea, and afterward descended the Nile from Abyssinia and from Meroe, the engraving is most likely in its origin, if not in its execution, an Æthiopian work, and of very remote antiquity. The under surfaces of none of the other scarabæi—of which I have examined more than thirty—at all resemble it. But the constellated Cushiochia, as she appears on our cylinder, with the pole-star above her head, are evidently displayed on it, though in a style of art very inferior; the chief difference between the two figures being, notwithstanding, worthy of especial notice—namely, that for some astronomical reason which we must endeavour to discover, the Cushiochia of the scarabæus does not, as she does on the cylinder, hold forth the *Corona*.

The scarabæus displays also the seven Pleiades, Atlantides, or Succoth-benoth, ranged in a line parallel to the back of the queen's chair; Al-debarân and the Hyades being above; the Crux-ansata, which has since become the conventional sign of the planet Venus, below; and one of our dubious figures, standing before Cushiochia—but, I confess I am uncertain which: the sculpture is so uncouth, that, "in truth 'twere hard to say" whether a dressed beard, or a protuberant breast, be intended by the artist to be shewn between the shoulder and upper hand of this figure.

I have accurately copied it, in the hope that the verbal inscription may meet with a decypherer, and that the reader may judge for himself of the rest.



I introduce this scarabæus in apposition to the cylinder, and trust that it will not be esteemed foreign to our Sabæan researches, nor digressing from our immediate purpose, if I offer the following short interpretation of its contents independently of the verbal inscription.

It appears to me (like many of the engraved cylinders) to be the horoscopic signet of some individual who had the fortune to be born before sun-rise in the morning, in the summer season, the Sun being in Scarabæus (☉) at the time. I suppose Cushiopeia, and the Pleiades which are seen arranged along the back of her chair, to have ascended at the hour of this nativity, and Al-debarân and the Hyades (the later stars of Taurus) which appear in a group between the figures and on the upper part of the gem, to have been in all probability just above the horizon:—Venus,

of auspicious and pleasurable omen, being the morning star, and lady of the ascendant.

I infer this with regard to the planet Venus, from finding her present diagrammatic symbol (♀), the Crux ansata, sculptured in the field of the stone, beneath—and constructively on the same meridian with,—Al-de-barân and the Hyades; consequently in her proper domicile of Taurus, where she is esteemed to be most potent. And since, between Taurus and Cancer,—which latter I have supposed to be the place of the Sun, there intervenes but the single sign Gemini, this might very well happen, and the planet Venus be at her requisite astronomical distance from the greater luminary.

This device on the Scarabæus, when taken with the subject of the cylinder, goes also to shew that the above named stars, together with the problematical figure, and the star which in both cases appears over the head of the enthroned queen, were habitually associated in the Sabæan horoscopes, consequently in their stellated charts; and *ergo*, that the said problematical figure, (as before surmised), is not a personified planet, but an ancient decan, or southern paranatellon, of Taurus.

The classical legends respecting Cassiopeia, agree that she was an Æthiopian queen, the wife of Cepheus; but add, that she gave offence to Neptune or to Nereus, by boasting herself to be fairer than the sea-nymphs, “in consequence of which, *they say*, she was thrown up among the stars, and there placed with her head downward, as a punishment for her confidence and pride.”*

The latter part of this legend is very lame; but the manner in which the Greek fabulists have related it, goes to confirm the assertion of Lord Verulam, that those who reported these ancient stories, neither invented, nor thoroughly understood, them. He “whom the king delighteth to honour” he decorateth with terrestrial stars: who then would ever dream of inflicting constellation “as a punishment?”—Such punishment, would indeed be too incredibly singular, for the idea to obtain, except for a moment’s ridicule. Beside, since Cassiopeia *circumscribes* the pole, in

* Dr. John Hill’s *Urania*, the “Sphere” of Manilius; and the Classical Dictionaries in general.

her diurnal revolution—whether her heels are *upward* or not, must of course depend on the season of the year and time of the night.

Yet he who will please to recollect, or look at, the *stars* of this constellation in the abstract, as they appear in nature, or on Cary's large globe, which is without the surrounding celestial forms, may easily satisfy himself by their relative situations or arrangement, that the legend has *some* foundation; that the Greeks have actually been guilty of the sacrilege to ancient science, of turning the original figure of the Æthiopian queen upside down; and that the stars when reversed, have a very remarkable and convincing conformity with the figure of our enthroned Sabæan Cushiopia. For the purpose of manifesting this curious ancient fact, and some others which have been stated concerning her stars severally, I exhibit outlines, both of the antique and modern figures, studded with the principal stars of the constellation—the modern being copied from the accurate planisphere of Mr. Heming.

Another curious fact emerges also from this rolling off of the Grecian clouds, and this restitution of Cushiopia. Engraved lines of astral effluence have been observed to pass from the Pleiades of our cylinder to the face of the queen; and when she is thus reinstated, the meridional or longitudinal lines of the globe which pass through the Pleiades, pass also through the head of Cushiopia—that is to say—the stars of her head and the Pleiades have the very same longitude, and were simultaneous in their setting when the pole of the equator was, where I shall shew that it must have been when this Sabæan engraving was produced; moreover, the star which is near the skirt of her robe, according to the arbitrary representations of some of the moderns, becomes that of her forth-held *hand*, called by Arabs, as I have before noticed, *Caph-al-Chadib*. Now it is impossible to suppose that the Arabs would have called a star in the skirt of Cassiopeia's robe, and which is in truth, much more near her *foot*, by the name of the stained *hand*. They must have been acquainted with the original figure, as she presents herself on the scarabæus of the British Museum and on the Boughton cylinder.

But beside Cicero, the Arabs, Tycho Brahe, and the engraved scarabæus

bæus, I have another witness to call in attestation of these very remote and curious particulars, when I have said a word or two as to the degree of credit to which he is entitled.

In an earlier part of this volume, I believe that I have expressed some doubt as to the authenticity of the Egyptian planispheres—if such they be—which have been published by father Kircher: by which I would rather be understood to invite those who may be able, to prove them to *be* authentic, than to insinuate that Athanasius Kircher was an intentional impostor. My suspicion is, that he compiled these planispheres. That he took some parts from actually existing monuments—some from one, and some from another—and filled up the rest from his reading, with perhaps a little too much help from an ardent imagination:—so that they are neither entirely authentic, nor entirely otherwise. But I may be mistaken; and the number of antiquarian fallacies that I have detected, may have made me too generally suspicious.

Should antique authorities exist for that part of his chart of the northern hemisphere which includes the asterisms between the sign Taurus and the arctic pole, they would be found to afford an interesting corroboration of the truths above stated, particularly with regard to the inversion of the figure of Cushiopia, and her ancient mythological and astronomical connexion with the Pleiades.

Kircher's planisphere has no measured degrees, but its author has removed the asterisms westward into the dodecatemorial spaces: that is to say, the asterism Taurus into the dodecatemorion of Aries, Aries into that of Pisces, and so on round the zodiac: hence it corresponds with this part of our present northern planisphere, when the 30 *degrees* of Taurus are centered in the pole of the Ecliptic: for in Kircher's, immediately above the Bull, is delineated a Hen and chickens, and immediately above these, sits our Æthiopian queen:—not “with her heels upward,” or as the Greeks have transmitted her, but more as she appears on the present cylinder—the chief differences being that the *Cathedra* is here of the Egyptian, not the Persepolitan, form; that the queen is Lotus-crowned; that her upper hand (*Caph-al-Chadib*) holds forth a small figure; and that a cross is attached to the *Corona*, converting it to the mystic symbol

which has been the subject of so much controversy, and connecting it mysteriously with that diagrammatic sign of the planet Venus, which accompanies the Cushiopia of green jasper.

Reverting from the scarabæus to the great celestial book of nature, and to the sculptured cylinder, let us next observe whether the stars which we have seen in the east, will lead us, like the magi of St. Matthew, toward the *place* where the stellated queen was more especially venerated; for, that the annual return of her stars at certain seasons, to stations of honour and of supposed efficacy, was—like those of Taurus at Babylon, and those of Boötes (Osiris) in Egypt—hailed as the harbinger of terrestrial blessings, by some or other of the oriental nations, I hope we may be allowed to assume. That the astronomical priests probably made use of the very signet before us—consecrating by its means, their victims, at the seasons of sacred observance, with the hallowed image of “their first mother,” the constellated queen of Æthiopia—will perhaps not be controverted, after what has been adduced, and what I shall next proceed to offer.

Having endeavoured to interpret the meaning of the several parts of the device of this engraving, we may now, with better hope of success, attempt the collective meaning of the whole; for which purpose it will be necessary to return to the globe; though not, I think, to the far off date mentioned by Tycho Brahe, when the stars of Cassiopeia rose with the first degrees of Aries.

But we must approach toward this remote era, if it be true, that “under the stars of their canonised queen, the Æthiopians ever afterward proceeded to solemnize the inauguration of the successors of Cepheus, in memorial of their first mother Cushiopia,” and if it be regarded as a credible presumption, that the present signet bore any reference to that ancient solemnity; for the words “ever after” seem to imply that no very long time elapsed between the demise of Cepheus (or Chepheus) and Cushiopia, and the commencement of the astronomical custom.

I shall venture to remove the colure to the next significant and conspicuous celestial mark, which I find to be *Regulus*;—a brilliant point

in the heavens, and which, lying on the Ecliptic, must once have been the very point touched by the northern tropic at the solstitial season.

At that time the pole of the Equator was removed from the *alpha Draconis*, about one-third of the space between it and *Kochab*, toward the latter; the former must therefore have been regarded as the star of the arctic pole, and consequently the large eight-pointed asterisk which is above the head of the Cushiochia of our gem, is the Alpha Draconis. My astronomical readers need not be informed, that in the low latitude of Saba, their arctic circle is of necessity so much narrowed, that the whole of the stars of the constellated queen, rise and set, which in our own latitude they do not.

The globe being rectified as above, let us proceed with our problem. It has in substance been already stated, that as the stars of Cushiochia set, in these low latitudes and at that distant period of time, those of the *Ataroth* (or Corona) ascended from the cusp of the horizon;—the stars which originally studded the bust of the queen (but which are now in the lower part of her figure) being simultaneous in their setting, with the Pleiades and also with the rising of the starry crown—coincidences which will probably be regarded as too striking to have happened without deep thought and successful contrivance on the part of those grateful astronomers who first constellated the heavens, and whose example in modern times, the science and happy fortune of Herschel alone has enabled him to emulate.

At that annual season when the Sun was on the same meridian with one or other of these eternal groups—presumptively that of the rising Corona,—we might reasonably have supposed, was celebrated that inauguration festival of the successors of Cepheus, to which Tycho Brahe's authorities have so pertinently alluded: and we can easily conceive, that at whatever other season of the year the demise of an Æthiopian monarch might take place, the coronation—though not the accession, of his successor, would be deferred (like that of our own king) till the auspicious stars arose to which religion looked up with her warmest hope, for sub-lunary prosperity.

But was this festival celebrated when the stars of the Northern Crown rose heliacally? This might be thought to be most likely, because, parallel to the mathematical solution which here presents itself, of the hieroglyphical enigma, there runs that beautiful poetic analogy which has already been noticed; but the supposition leaves us short of certainty, and there are other circumstances which must be taken into the account. Let us reflect. This must have happened in the autumn, when the Sun was in Scorpius, and when nature was pouring forth her annual abundance into the lap of Æthiopia; and consequently must have been three months after their great solstitial festival. Still, this question is admissible: nor can we be quite certain that Midsummer was not the season of celebration.

Whether it was or not, it would appear from the monument which is here the subject of comment, that the same stars which in the country where it originated, were the acknowledged and appointed phenomena, or signs, of the above festival, were the astral signs of the solstitial festival also, when at mid-day the great god of the Sabæan idolatry, shone forth exultingly,—as expressed by our graven image,—in the intensity of his might; and perhaps when the Grecian Jupiter himself was fabled by the first of poets to feast annually at the Æthiopian table of the Sun.

The globe, rectified as I have said, and with the pole elevated to the latitude of Saba, will easily shew, that as the stars of the Corona Borealis rise in that latitude, those of Cushiopia set: her stars *psi* and *omega*, the former of which was originally that of her forth-held hand, departing as the earliest of the Corona rises; another of the same (third) magnitude, nearly with the rising of *Al-phecca* (the *gem*, or chief star of the Corona), and the remainder following within 20 minutes, during which the circle of the Corona is completely displayed.

“The seven stars” of the prophet Amos and of our cylinder—those Taurine stars, which, throughout these researches, have proved to be of such ancient and signal importance; and which derived that importance, in part, from their passing vertically over the Sabæan climates:—the stars also which I have conjectured to have once belonged to those problematical figures which we have observed to be not unfrequently repeated on

the Sabæan gems, and which are engaged in the modern Erydanus, are now setting, together with those originally in the head of Cushiopia—the *gamma* of Erydanus (of the second magnitude) departing precisely with the Pleiades, just after the Corona is complete, and as the last star of Cushiopia, (originally that of her crowned head,) dies in the *occident*. I have before noticed (I believe) that *death*, and *western descent*, were, in that most ancient, aboriginal language of the star-worshippers, expressed by the same word.

The above transits of course took place, cosmically speaking, at every revolution of the terrestrial globe, in the given Æthiopian latitude—earlier or later in the night; and were visible for the full half of every year, to the infinite delight, and to the constant feeding of the faith, of these primitive astronomers: which brings us to our great leading question of, *Where was the Sun*, with reference to these signs, at those prime seasons of sacred and annual observance, when the poles of the equator and the ecliptic were coincident, or formed a right line with the meridian?

Nor is the answer to this question a whit less interesting or remarkable. The stars would, and did, thus rise and set, precisely when the solstitial Sun was with Regulus, the splendid mark at which we agreed to place him at the outset of this problem; and Regulus, and the solar orb were, in this latitude, exactly in the zenith on midsummer-day. This must have been the *solstitial* mark; and the ball which surmounts the central rod of our Ashre, may have been intended to denote the place of the Sun and Regulus at the time specified. The conjunctive orbs must have arrived at this acmé of Sabæan honour and glory, precisely as the circlet of Ataroth was complete, and before the Pleiades had quitted the western horizon. And notwithstanding that the stars could not (of course) be visible in this diurnal state of the heavens, their places might be known to those Chephenes who directed the engraving of the Boughton cylinder, with more exactness than some of us moderns may be aware of.

In the midst of the longest night also, at the season when the Sun was at the then Brumal solstice, in Aquarius, that which I have above described, would be the visible state of the nocturnal heavens:—that is to say, Regulus would occupy the zenith; the Pleiades would be departing

with the later stars of Cushiopia; and those of the Ataroth would have risen in full display: But people who adored the Sun would scarcely think of sacrificing to him in his absence; yet the nocturnal, may possibly be, in this instance and upon a sacred occasion, combined in the engraving, with the diurnal, display of the celestial phenomena.

And now concerning those slender collateral lines emanating from the solar orb of our gem, of which I stated in an earlier page of this essay, that I found it eligible to defer to treat: I did so because I would avoid complexity where it was practicable, and not overburthen the reader's mind in the outset of our journey: but in candour I must acknowledge that I had also other reasons. I found *myself*, as well as the Sun, at a *stand-still*; but in no other respect resembling that luminary, for I could then throw no further light upon the subject. I wanted more astronomy than I possessed—something of solar ardour too would have been desirable, in order to enable me to dissipate the scepticism with which my mind was clouded, and to determine between the ideas which were existing there on the subject; and perhaps I might not have been much better off at present, notwithstanding my hopes to the contrary, but for the posterior receipt of a present of fac-similes of antique gems from the Baron Denon. Upon one of them (a cylinder) is a variation of the winged and radiant orb, which goes to confirm the opinion I had before conceived, that the Sun at the *summer* solstice, is meant to be expressed on our monument, with the addition that the *tropics were known* to the Sabæan astronomers of the primitive ages.

Bringing my witnesses together, I now appear to perceive from their concurrence, that the orb of luminous effluence, is at his utmost northern advance in the ecliptic, where it is met by the northern tropic, the south pole being upward: and that those questionable emanating lines, are the chords of those arcs of the said tropic which are intercepted between the solstitial point and the eastern and western horizons of those latitudes or places respectively, to which the monuments severally belong; and of course expressed with reference to the upright rod of the Ashre, and the meridian of the place, at the noon of midsummer-day.

Of Denon's solar image, I have given a sketch upon the same plate

with my illustrations of Cushiopia, that every reader may draw his own inferences on comparison. The angle subtended here, is so nearly the same as that of the riband-streamers from the solar or regal zones at Nakshi-Rustum and Persepolis, as to suggest, that they belonged to nearly the same latitude, and that the general meaning of this Sabæan hieroglyph was in all latitudes the same; namely, *the solstitial Sun*, or solar orb, "riding at his highest noon," and beaming in the intensity of his might. The difference between the Baron's and your's (Sir William) appears to be, that his belongs to a higher latitude, and your's to a lower. The wider angle subtended by the emanating lines on your's, necessarily indicates—if my premises be correct—an horizon nearer to the equinoctial line, which is conformable to our earlier computations. But his seems to contain an indication of the curve of the tropic itself, in addition to its chord—though certainly expressed by too elliptical an arch: The whole of this solar sculpture is indeed too inartificially performed to become subservient to any other purpose than that of general information; which is perhaps fortunate for your present correspondent, as spherical triangles are quite above his reach.

Again then we are conducted by a fresh route, and with a fresh accession of evidence, to the season of one of the solstices; and, whether or not the preponderance of sculptured evidence should be found to be in favour of that of summer; whether the *alpha Leonis*, or the opposite point of the ecliptic in Aquarius, be understood to be expressed as having been on the meridian—we are carried back to the same remote era for the date of the gem, and the origin of those ceremonials of solstitial sacrifice, and of the inauguration or coronation festivals—which were celebrated on the accession of every Æthiopian monarch, in honour of the canonized Cushiopia.

The computation of this date is simply as follows. We have seen that Regulus was then the point where the solstitial colure cut the ecliptic: this point is about 57° from its present place; which number multiplied into the generally received rate of precession, 72, gives a result of 4,104 years, or 2,282 B. C.

This date, like those of most of the Sabæan monuments that I have in-

vestigated, is rather too early for some of the systems of sacred chronology. But Science is not to be shackled where *men* have differed: on the contrary, these are precisely the places where she may be best pleased and most privileged, to exercise her liberty and her powers; and this date accords very well with the 3,128 years which the Septuagint have reckoned between the Deluge and the birth of Christ, as well as with the long races or dynasties of Homeritish or Cushite kings which Volney essayed to trace among broken fragments and disjointed documents.

Yet as some doubt has been expressed, as to whether the present engraving (found in Phœnicia) be a work of Æthiopian or of Sidonian art, I may be expected to return to the state of the celestial phenomena in this more northerly latitude; for, as old Thomas Hearne, who made himself so famous for learning what father Time had forgotten, has pronounced geography and chronology to be “the *eyes of history*,” we can scarcely take too much care that the Muse does not squint. She should look straight forward; and whether forward or backward—she should certainly look straight.

Not that there is any crookedness that I know of, in the computation which is submitted above; neither does the Syrian solution lead us with more certainty toward a less distant era; for although the era to which it does lead, be somewhat less distant, yet, by attaching ourselves to it, we should in a great degree lose the support derived from the ancient legend of Cushiopia. Joppa is indeed mentioned in the Greek versions of her story; but *that* Joppa is allowed to have been on the southern shores of the Arabian peninsula. However, that the reader may judge for himself, and apart from all antiquarian predilections which may possibly be thought to possess the mind of the author, it may not be amiss to add, that in the Phœnician latitudes, when the stars of Cushiopia began to set, those of the Corona had just arisen; *Kochab* being at the time the polar star, and the *lambda Leonis* on the meridian.

Taking the *lambda Leonis* as the point of the zodiac intersected at the time by the solstitial colure, we arrive at a cardinal mark which is within a small fraction of 45° from the present place of the summer solstice, and which carries us back to a period of the sacred history when the Canaan-

ites were yet strong in their native land, and Israel was warring with a *Cushite* king of Mesopotamia—namely, a little more than fourteen centuries before the commencement of the Christian era.

The great Hebrew general, Joshua, who succeeded their still greater legislator, was now recently dead: the children of Israel did evil in the sight of the Lord, and served Baalim and the Asherim; and among the nations which the Lord Jehovah had left to prove them, were five lords of the Philistines; *all the Canaanites*; the *Sidonians*; and the Hivites that dwelt in mount Lebanon, from mount Baal-hermon unto the entering in of Hamath. They were to prove Israel, to know whether they would hearken to the commandments of Jehovah, which he commanded by the mouth of Moses.

The children of Israel dwelt at the time among the Canaanites, Hittites, and Amorites, &c.: and they took their daughters to be their own wives; and gave their daughters to the sons of these Sabæans, and served their gods. Therefore the anger of the Lord was hot against Israel, and he sold them into the hand of Chushan-rishathaim, king of Mesopotamia.—(*Judges*, ch. iii.)

So that we, in this view of the subject, again arrive at an era, german to the occasion of our journey, attended with great probabilities, and at a place where such signets as the present, must have been in frequent use. Clio, moreover, in these remote retrospections, looks as she ought, with her sister Urania at her elbow.

The *lambda Leonis* is in this latter reckoning,—applicable to the land of Canaan,—found to occupy the place of *Regulus* in the former computation. The rest of the leading asterisms are still those which have already been described to be displayed on the cylinder, posited with similar relations to *Cushiopia* and the *Ataroth*; and consequently, being supposed to possess a similar celestial influence on the occasions of using the signet. The small arc, and crescent moon, of the engraving, alone remain to be noticed.

In explaining the small arc, which on the present monument surmounts the solar orb, we have before observed that the Sun at the *Tropic*, (סבב in the Hebrew) meant, the Sun at his curved turn: but he makes these

curved turns so slowly, compared with his progress through the rest of the year, that the word by which the Greeks denoted these seasons, when they spoke with technic reference to the Sun, was *Sol-stice*, which is literally the stationary Sun, (or the Sun at a stand). In fact, his diurnal course is for a while so nearly the same at these seasons, that the ancient Sabæans might find it difficult, in the existing state of the constitution of their calendar,—that is to say, of those means which served them instead of a calendar—to know which was the precise day for the celebration of this sacred festival, and appear therefore to have regulated it by the Moon. The Moon was to the Hebrews emphatically “the sign of feasts,” because it had long been so to their star-worshipping ancestry: and but for the discovery of such monuments as the present, and from comparing them with the Bible, we cannot now know how much or how little of the laws of Moses were derived from previously existing customs of their Assyrian forefathers.

It is for this reason, as I imagine, that we find a *crescent Moon* sculptured near the winged orb—and as if she had just passed her conjunction—on the present cylinder. It seems to say—the day on which the new Moon first appears, after the heliacal rising of the star *Regulus*, or of the *lambda Leonis*, is the true day for celebrating the solstitial festival: a rule, which (as developed in a former essay) descended from the Chaldeans and the Phœnicians to the Greeks.

Having thus proceeded through the details of the engraved contents of your very interesting cylinder, to the best of my judgment and ability, I shall here beg leave to close the present Essay, and with it, the present volume of *SABÆAN RESEARCHES*. I have the honour to remain, (dear Sir William), your much obliged and obedient servant.

current time so slowly, compared with the progress through the rest of the year, that the word by which the Greeks denoted these seasons, when they spoke with technical reference to the Sun, was *solstice*, which is literally the stationary Sun, (or the Sun at a stand). In fact, his diurnal course is for a while so nearly the same at these seasons, that the ancient Egyptians might find it difficult, in the existing state of the constitution of their calendar—that is to say, of those means which served them instead of a calendar—to know which was the precise day for the celebration of this sacred festival, and appear therefore to have regulated it by the Moon. The Moon was to the Hebrews emphatically "the sign of time," because it had long been so to their star-worshipping ancestors: and that the discovery of such monuments as the present, and from comparing them with the Bible, we cannot now know how much or how little of the laws of Moses were derived from previously existing customs of their Assyrian forefathers.

It is for this reason, as I imagine, that we find a crescent Moon emblemized near the winged orb—and as it also had just passed her conjunction with the present cylinder. It seems to say—the day on which the new Moon first appears, after the partial rising of the star Venus, is at the Jewish Exodus, is the true day for celebrating the national festival: a date which (as depicted in a former essay) descended from the Egyptians and the Phoenicians to the Greeks.

Having thus proceeded through the details of the engraved cylinder to your very interesting cylinder, to the best of my judgment and ability, I shall here beg leave to close the present Essay, and wish it the pleasant volume of *SARAH HARRINGTON*. I have the honour to remain, Sir, your most obedient and devoted servant.

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